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STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

TRANSCRIPT OF PROCEEDINGS
Evidentiary Hearing
May 9, 2018
Jefferson City, Missouri
Volume 3

In the Matter of the)
Application of the Empire)
District Electric Company) File No. EO-2018-0092
For Approval of its)
Customer Savings Plan)

MICHAEL BUSHMANN, Presiding,
REGULATORY LAW JUDGE.

DANIEL Y HALL, Chairman
WILLIAM KENNEY,
SCOTT T. RUPP,
RYAN SILVEY,
COMMISSIONERS.

REPORTED BY:
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1 PROCEEDINGS

2 (WHEREUPON, the hearing began at 9:02
3 a.m.)

4 JUDGE BUSHMANN: Good morning. Today
5 is May 9th, 2018. The Commission has set this time
6 for an evidentiary hearing in the matter of the
7 application of the Empire District Electric Company
8 for approval of its customer savings plan filed
9 under E0-2018-0092.

10 My name is Michael Bushmann. I'm the
11 Regulatory Law Judge that's been assigned to this
12 hearing. Let's have counsel for the parties make
13 their entries of appearance. For the Empire
14 District Electric Company.

15 MR. COOPER: Thank you, your Honor.
16 Dean Cooper and Diana Carter of law firm of Brydon,
17 Swearingen & England, and Sarah Knowlton from
18 Liberty Utilities on behalf of the Empire District
19 Electric Company.

20 JUDGE BUSHMANN: Commission Staff.

21 MS. FORCK: For the Staff of the
22 Missouri Public Service Commission, I'm Marcella
23 Forck, and I have with me Nicole Mers, and our
24 information has been provided to the court
25 reporter.

1 JUDGE BUSHMANN: Office of the Public
2 Counsel.

3 MR. HAMPTON WILLIAMS: Thank you,
4 Judge. For the Office of the Public Counsel,
5 Hampton Williams and Nathan Williams. Our
6 information has been provided to the court
7 reporter.

8 JUDGE BUSHMANN: Missouri Division of
9 Energy.

10 MR. POSTON: Thank you. Marc Poston
11 appearing for the Missouri Division of Energy.

12 JUDGE BUSHMANN: Missouri Energy
13 Consumers Group.

14 MR. WOODSMALL: David Woodsmall on
15 behalf of MECG.

16 JUDGE BUSHMANN: Renew Missouri.

17 MR. LINHARES: Thank you, Judge.
18 Appearing for Renew Missouri, Andrew Linhares, and
19 the court reporter has our information.

20 JUDGE BUSHMANN: Sierra Club.

21 MR. ROBERTSON: Henry Robertson,
22 Great Rivers Environmental Law Center, and my
23 information has been provided to the court
24 reporter.

25 JUDGE BUSHMANN: And City of Joplin.

1 MS. BELL: Stephanie Bell with he
2 Ellinger & Associates, LLC, for the City of Joplin,
3 and my information has also been provided to the
4 court reporter.

5 JUDGE BUSHMANN: Thank you. Ameren
6 Missouri and Dogwood Energy have both been excused
7 from appearing at the hearing.

8 I'd like to advise anybody in the
9 audience to please make sure that you silenced any
10 mobile devices or cell phones.

11 Do the parties have any preliminary
12 matters that they need to take up at this time? I
13 don't hear any.

14 I would like to notify the parties
15 that I'm going to take official notice of two
16 things that were filed in the case: The
17 Nonunanimous Stipulation & Agreement that was filed
18 on April 24th, 2018, and the addendum to that
19 agreement that was filed on May 7th, 2018. I'll
20 take official notice of those two.

21 As far as the order of witnesses,
22 we'll go over or use the order filed by the parties
23 that was revised and just filed recently. I would
24 like to go ahead, since the parties have agreed to
25 waive cross-examination and appearance of five

1 witnesses, while we're at it, before I forget about
2 it later, we might as well go ahead and get that
3 taken care of. I believe for Empire there were
4 three witnesses.

5 MR. COOPER: That's correct, your
6 Honor. We would offer the direct testimony of Greg
7 Macias, which I believe has been identified as
8 Exhibit No. 5. We would offer the affidavit of
9 Charlotte North, which has been marked as or
10 identified as Exhibit No. 13. And we would offer
11 the direct testimony of Dane Watson, which has been
12 identified as Exhibit 18.

13 JUDGE BUSHMANN: Are there any
14 objections to the receipt of those exhibits?

15 (No response.)

16 JUDGE BUSHMANN: Hearing none, they
17 are received into the record.

18 (EMPIRE EXHIBITS 5, 13 AND 18 WERE
19 RECEIVED INTO EVIDENCE.)

20 JUDGE BUSHMANN: And for Renew
21 Missouri there was one exhibit, I believe.

22 MR. LINHARES: Yes, Judge. We would
23 offer the exhibit of rebuttal testimony of James
24 Owen, which will be marked as Exhibit 400, I
25 believe.

1 JUDGE BUSHMANN: That's what I have.
2 Are there any objections to the receipt of that
3 exhibit?

4 (No response.)

5 JUDGE BUSHMANN: Hearing none, it's
6 admitted into the record.

7 (RENEW MISSOURI EXHIBIT 400 WAS
8 RECEIVED INTO EVIDENCE.)

9 JUDGE BUSHMANN: And then the last
10 one is for Division of Energy.

11 MR. POSTON: Yes, Judge. We have
12 Exhibit 300, the rebuttal testimony of Martin
13 Hyman.

14 JUDGE BUSHMANN: Any objections?

15 (No response.)

16 JUDGE BUSHMANN: Hearing none, it's
17 admitted.

18 (DIVISION OF ENERGY EXHIBIT 300 WAS
19 RECEIVED INTO EVIDENCE.)

20 JUDGE BUSHMANN: As far as scheduling
21 today, there's one thing that's a little bit out of
22 the ordinary of our usual hearing process is that
23 the Commissioners, to accommodate schedules, have
24 an agenda meeting today at two o'clock. So my
25 thought was to try and not have such a long break

1 to wait till then is to take maybe a short early
2 lunch, maybe around 11:30 for 45 minutes or so, and
3 then come back and then break again for a short
4 period of time around 2 o'clock. That way we can
5 try and keep going as much as possible. If that
6 presents a hardship for any of the parties, just
7 let me know at a break.

8 Anything else that needs to be
9 brought up before we go to opening statements? In
10 that case, the first opening statement would be by
11 Empire District Electric Company.

12 MR. COOPER: good morning. I'm here
13 today to represent the Empire District Electric
14 Company. I apologize on the front side. My
15 opening today will be a little longer than you're
16 probably used to from me. There's several things
17 to be pulled together in this case, and so we'll
18 try to work through those.

19 I would like to introduce, we
20 mentioned earlier that Ms. Sarah Knowlton will be
21 representing the company this week as well.
22 Ms. Knowlton is at counsel table. She is a
23 regulatory counsel for Liberty Utilities. She's
24 admitted to practice law before the New Hampshire
25 Bar, has been admitted for purposes of this case

1 and will be actively participating this week.

2 We're here today to present what we
3 think is a very exciting project for Empire, for
4 its customers, for the state of Missouri. The
5 company's proposal is found in the Nonunanimous
6 Stipulation & Agreement that was filed with the
7 Commission on April 24th, as amended by the
8 addendum filed on May 7th that the Judge took
9 administrative notice of earlier.

10 Empire was joined in the stipulation
11 by the Staff of the Commission, Missouri Energy
12 Consumers Group, the Division of Energy and Renew
13 Missouri advocates. Although it's been objected
14 to, it remains the position of Empire in this case.

15 The stipulation was an attempt by the
16 signatories to come together in a way that would
17 try to find the sweet spot for a meaningful project
18 that would provide near-term benefits, future
19 benefits and protections for Empire's customers.
20 Empire believes that the provisions of the
21 stipulation have accomplished these goals and
22 identified a revised strategy for Empire's
23 generation fleet that will bring customers
24 significant savings for years to come as opposed to
25 merely continuing with the status quo.

1 Simply put, the stipulation is
2 expected to bring \$169 million in present value
3 savings to customers over the next 20 years and
4 reduce Empire's portfolio risk significantly. The
5 substantial savings result from Empire's ability to
6 take advantage of expiring production tax credits
7 and tax equity financing, which cuts the capital
8 cost of the wind in approximately half.

9 Risk is reduced as a result of the
10 shift from a portfolio that is dominated by
11 resources with substantial ongoing fuel costs to a
12 portfolio with fewer ongoing fuel costs.

13 Moreover, as you will hear from
14 Empire, MECG and Staff, the stipulation contains
15 important provisions to protect customers against
16 down-side market risk, which was extensively
17 analyzed by Empire in the docket.

18 The stipulation calls for up to
19 600 megawatts of wind projects that are located
20 within the Southwest Power Pool footprint with
21 energy and capacity deliverable to the Empire
22 service territory. There's also an additional
23 requirement that I will discuss later in my
24 opening. Near the end I'll want to go in camera
25 for a few minutes.

1 But additionally the stipulation
2 confirms that the Commission would see any Missouri
3 projects in a specific CCN application and could
4 see any non-Missouri projects as well in CCN
5 applications.

6 The stipulation requires tax equity
7 financing within certain parameters in order to
8 take advantage of existing federal production tax
9 credits for the great benefit of Empire's
10 customers.

11 Because of the concerns stated by the
12 parties related to the previously proposed
13 immediate closure of Empire's Asbury coal
14 generation facility, Empire agreed to proceed only
15 with approval of the wind acquisition and leave
16 Asbury's future operations within the discretion of
17 management to pursue in future electric utility
18 resource planning filings.

19 So long as Empire's acquisition of
20 the wind projects meet the criteria of the
21 stipulation, the signatories agree Empire should be
22 authorized to record its capital investment to
23 acquire the wind projects as utility plant in
24 service subject to audit in Empire's next general
25 rate case.

1 Associated with that accounting
2 direction, the signatories also agree on the
3 following: The signatories agree not to contest
4 and recommend that the Commission find that given
5 the information presented in EO-2018-0092, and
6 considering that Empire must make decisions
7 prospectively rather than in reliance on hindsight,
8 the decision to acquire up to 600 megawatts of wind
9 projects under the terms of the stipulation is
10 reasonable. Similarly --

11 CHAIRMAN HALL: Let me stop you there
12 for a second.

13 MR. COOPER: Yes, sir.

14 CHAIRMAN HALL: So is that decisional
15 prudence? Is that what is being requested here?

16 MR. COOPER: It certainly is -- we
17 would like a fact finding that directionally the
18 company is moving the right direction. I think
19 it -- the question of prudence involves more
20 things. It involves a review of the costs
21 ultimately. It involves a review of the execution
22 of the projects, both of which the stipulation
23 specifically calls out and confirms are questions
24 for future rate cases and not something that the
25 company's trying to -- trying to get here.

1 CHAIRMAN HALL: I've been confused
2 about this from the outset, and I continue to be
3 confused. You're asking, the parties are asking
4 this Commission to make a decision that acquiring
5 the 600 megawatts of wind is reasonable now based
6 upon the information at your disposal, correct?

7 MR. COOPER: Correct. Well, at the
8 Commission's disposal as well, yes.

9 CHAIRMAN HALL: What does that mean
10 legally three years from now, two years from now,
11 with a new Commission in place? What does it mean?

12 MR. COOPER: Well, I think it's a
13 factual finding that certainly the company would
14 cite in that context and say that if someone's
15 arguing you shouldn't have built the wind projects
16 at all, if you -- if someone is saying, you know,
17 it should have been 200 megawatts instead of
18 600 megawatts, certainly the company is going to
19 have a factual finding that it will refer to and
20 say, look, at the time the decision was made,
21 here's what was known and here was -- here was the
22 finding.

23 It's not greatly unlike -- I was
24 involved many years ago in a case for Missouri
25 American where they were seeking a certificate for

1 their St. Joe treatment plant, and in that case the
2 Commission made a distinction between those two
3 things, said they will make no finding regarding
4 the prudence of the actual costs incurred and the
5 management of construction; however, based upon the
6 evidence presented, the extensive evidence
7 presented, the Commission finds that the proposed
8 project consisting of the facilities for a new
9 groundwater source of supply and treatment at a
10 remote site is a reasonable alternative.

11 I mean, that's the sort of thing
12 we're looking for here. It's a very large project.
13 It's a very large project for this company, and it
14 is hard for the company to take those steps without
15 at least some indication from the Commission that
16 directionally it's headed in the right direction.

17 CHAIRMAN HALL: But you do not view
18 that as decisional prudence?

19 MR. COOPER: Well --

20 CHAIRMAN HALL: I mean, the
21 distinction between the decision to go forward with
22 the project and whether the costs incurred in the
23 process, those are two different things, and I
24 understand that distinction and I want to -- I'm
25 trying to understand whether that is the

1 distinction that's relevant here or if it's
2 something else.

3 MR. COOPER: I think it is. The
4 mention of the word prudence is what's causing me
5 hesitation, because most of the time prudence
6 incorporates all those things, right? It's the
7 decision. It's the -- it's the cost. It's the
8 execution. It's the -- it's the finding that
9 ultimately allows those costs to show up in the
10 company's rates, and certainly we're not trying to
11 deal with all three of those. We're only trying to
12 deal with the first step of that process.

13 CHAIRMAN HALL: Okay. Thank you.

14 MR. COOPER: Now, similar really to
15 our discussion we just had, and this is a little
16 less specific, though, as to the Commission,
17 because keeping Asbury operating may give rise to
18 approximately \$20 million in investment to comply
19 with the EPA's coal combustion residuals rules and
20 effluent limitation guidelines, the signatories
21 have agreed that in future rate cases they shall
22 not object to Empire's recovery of and return on
23 the net CCR investment at Empire's weighted average
24 cost of capital if the investment is needed.

25 The question becomes what do the

1 customers get in this proposal? I think first they
2 get low-cost renewable generation assets that,
3 unlike other sources of generation, have no cost of
4 fuel, and under this plan have a substantial
5 portion of their costs paid for by tax equity
6 partners.

7 CHAIRMAN HALL: I'm sorry, and I'll
8 try to refrain from constant interruption because
9 that is not conducive to a good opening. So
10 concerning the CCR investment, are -- you don't
11 need anything from this Commission related to that.
12 The stipulation is an agreement amongst the
13 parties, and the Commission can essentially ignore
14 that with regards to what you're asking us to do;
15 is that correct?

16 MR. COOPER: Can ignore that? I
17 certainly think you should be aware of it, but yes,
18 the language is specific to the agreement of the
19 signatories.

20 CHAIRMAN HALL: Okay. Thank you.

21 MR. COOPER: The second item in terms
22 of customer benefit that I would point to is the
23 market price protection provision that mitigates
24 down-side risk up to \$35 million and ensures that
25 customers get 100 percent of all upside benefits

1 from the project.

2 Third, a rate case moratorium that
3 will ensure that Empire's base rates will not have
4 changed for a minimum of three and a half years by
5 the time the next rate case is conducted. And a
6 known date for rate reductions related to the
7 Federal Tax Cuts and Jobs Acts that eliminates any
8 questions about legislation, process or legal
9 issues and provides nearly \$18 million of immediate
10 benefits to customers.

11 Now, the original subject of this
12 application is what Empire called the customer
13 savings plan. Customer savings plan resulted from
14 Empire's analysis of whether it could be bring
15 savings to its customers by taking advantage of the
16 historically low cost of acquiring new wind
17 generation using tax equity financing to maximize
18 the use of federal tax incentives and perhaps
19 retiring its vintage 1970s power plant that does
20 not get dispatched as frequently as it used to and
21 likely needs another \$20 million invested to meet
22 environmental regulations.

23 In order to determine what course of
24 action would be most advantageous for customers,
25 the company conducted an analysis, and that and

1 analysis is called the generation fleet savings
2 analysis, or GFSA. The GFSA updated Empire's 2016
3 IRP plan, which embodies what I refer to quite
4 often as the status quo, with the most current
5 information on wind construction costs, the
6 potential benefits of tax equity financing, and
7 forecast market conditions to see if savings could
8 be achieved for customers.

9 The company then hired Charles River
10 Associates to review its analysis and recommend an
11 approach to building business case with scenarios
12 and sensitivities.

13 Empire's witness Jim McMahon, who's
14 from CRA and has substantial expertise in resource
15 planning for vertically integrated utilities in the
16 United States like Empire, will explain that after
17 all of the analysis, including numerous scenarios
18 and sensitivities proposed by stakeholders,
19 including OPC, the customer savings plan was
20 compelling. It showed significant customer savings
21 and risk reductions for Empire's customers.

22 The GFSA results originally showed
23 that \$325 million -- or showed \$325 million in
24 20-year present value savings would result if
25 Empire were to acquire up to 800 megawatts of wind

1 generation located in or near its service territory
2 through a tax equity partnership and retired the
3 Asbury generation unit in 2019.

4 In regard to the tax equity
5 partnership, Empire's witness Todd Mooney will
6 explain that because of the federal tax credits, we
7 are at a point in time when the company has the
8 ability to have someone else pay a substantial
9 amount of the cost to acquire wind. In other
10 words, we would say wind is on sale.

11 In order of magnitude, this means
12 that Empire will be able to buy wind at a
13 substantial discount, approximately \$711 per
14 kilowatt versus \$1,587 per kilowatt. This is a
15 fantastic opportunity for a customer benefit that
16 exists today. We won't have this situation in the
17 future as the full PTCs will expire if wind
18 projects are not in service by December of 2020.

19 And again, just to reiterate, with
20 the tax equity customers will pay approximately
21 \$711 per kilowatt versus 1,587, a tremendous
22 difference.

23 Given that situation, I would like to
24 respond briefly to the allegation that Empire's
25 purpose in proposing to build wind is exclusively

1 motivated by a desire to build its rate base. If
2 that were the case, Empire certainly would not be
3 working this hard to utilize tax equity financing
4 and put something less than half of the total cost
5 of the total project into rate base.

6 Now, I mentioned previously that the
7 wind must be in or near Empire's service territory.
8 Why is that important? As you know, building
9 multi-state transmission lines can be a long,
10 drawn-out and costly affair. Empire was strategic
11 about this in its plan to develop cost-saving wind
12 generation for its customers.

13 Empire's service territory, which is
14 shown on the handout that we gave you before my
15 opening started, on the second page, and if you
16 look at that it's the area in yellow is the
17 electric service territory. That service territory
18 includes southwest Missouri, Kansas, Oklahoma and
19 Arkansas.

20 Empire has access to two sites here
21 in Missouri that are close to its system and can
22 deliver low-cost wind. This Missouri wind, as well
23 as wind located in Kansas and Oklahoma, is near its
24 transmission system. In fact, one site would
25 interconnect very near Asbury. And those options

1 are available in a way that does not require the
2 same scale of transmission lines or upgrades
3 required by other projects. This has a very
4 positive effect not only on the cost of developing
5 the project but lowers the risk of any negative
6 prices that might impact the economic performance
7 of these wind farms.

8 Further, Empire witness Blake Mertens
9 can explain why adding this wind to the company's
10 portfolio or its generation fleet will not harm
11 reliability and is a good long-term strategy.

12 Back to the tax equity for a minute.
13 As I mentioned before, a significant advantage for
14 this project comes from the use of a tax equity
15 financing structure, something Empire's ultimate
16 parent, Algonquin Power and Utilities Corp, has
17 lots of experience using for both wind and solar
18 projects.

19 A tax equity structure is a method of
20 financing renewable energy projects using federal
21 PTCs. In a tax equity structure, large tax-paying
22 corporations, typically large banks such as Wells
23 Fargo or Bank of America or Merrill Lynch, become
24 equity partners in a wind project.

25 In this case, a tax equity partner

1 would provide a substantial amount of the capital
2 for Empire to acquire the wind farms and in
3 exchange would receive the tax incentives such as
4 the PTCs generated from the wind project during the
5 first ten years of the project's life.

6 In addition, the tax equity partner
7 receives cash distributions in the latter years of
8 this ten-year period, typically year six to ten, as
9 part of its return and recovery of the capital
10 invested.

11 On or before the end of the first ten
12 years when the tax equity partner has received its
13 return on and recovery of its investment, the
14 ownership structure flips and the majority of the
15 ongoing financial benefits of the wind project
16 transfers over to Empire, with the tax equity
17 partner retaining a nominal residual stake in the
18 partnership, typically around 5 percent. At this
19 point Empire would have an option to purchase the
20 tax equity investor's 5 percent in the partnership.

21 As Empire's witness Todd Mooney
22 explains, using this partnership will result in
23 between 4 and \$7 per megawatt hour savings for
24 Empire's customers for the generation that is
25 acquired.

1 This is not the first time that the
2 Liberty family of companies has utilized such a
3 process. Empire's electric distribution utility
4 affiliate in California, which is Liberty Calpeco,
5 has proven that the tax equity partnership
6 structure can provide real savings to customers, in
7 case \$5 per megawatt hour compared to existing
8 supply sources. The company wants to do the same
9 here in Missouri.

10 Again, Empire witness Todd Mooney can
11 address any questions you might have about tax
12 equity financing as it relates to this project.

13 In order to determine whether its
14 assumptions in the GFSA regarding the cost of wind
15 generation were indicative of market prices to
16 acquire wind generation, Empire issued a notice of
17 intent to potential bidders in October of 2017, and
18 thereafter issued a competitive request for
19 proposal to identify potential wind projects, up to
20 800 megawatts of nameplate capacity to be
21 constructed and sold to Empire through a build to
22 own and transfer transaction.

23 The RFP required that this capacity
24 could be satisfied through one project or multiple
25 projects with each project having a minimum

1 nameplate capacity of 100 megawatts, where each
2 project must achieve commercial operation in time
3 to qualify for the maximum amount of PTCs, and each
4 project, as I stated before, had to be located
5 within the SPP footprint with energy and capacity
6 deliverable to Empire's service territory.

7 Empire received a significant number
8 of bids and, after evaluating them, has determined
9 that it could acquire up to the 600 megawatts of
10 wind generation called for by the stipulation in or
11 near its service territory at prices that beat the
12 initial GFSA assumptions. That means that the
13 actual wind projects that Empire could buy cost
14 less than what the company assumed in the original
15 analysis.

16 After receiving these bids, Empire
17 updated its GFSA analysis with the bid results and,
18 not surprisingly, determined that the projected
19 savings would be higher than originally modeled.
20 These actual projects for which negotiations
21 remained underway were also used in the modeling of
22 the stipulation plan as it appears in Mr. McMahon's
23 affidavit in support of the Nonunanimous
24 Stipulation & Agreement.

25 Empire's analysis of the stipulation

1 plan indicates that up to 600 megawatts of wind
2 will generate the customer net present value
3 savings that are reflected on page 3 of the handout
4 I gave you previously as relative to the 2016 IRP
5 preferred plan; so 169 million in 20-year savings,
6 295 million in 30-year savings.

7 Again, the 600 megawatt wind
8 portfolio analyzed is based on short-listed bids
9 received in response to Empire's request for
10 proposal. The projects comprising the
11 600 megawatts that were modeled are located on
12 three different sites in or near Empire's service
13 territory.

14 Empire witness Tim Wilson can address
15 questions related to the results of the RFP, the
16 status of the contract negotiations, and Empire
17 witness Jim McMahon can address questions as to the
18 additional modeling that has been performed in
19 response to those RFP results and why concerns that
20 have been raised by non-signatories are misplaced.

21 So what's not to like? As we know
22 from the testimony and affidavits, the objections
23 of the parties have centered around certain
24 concerns: First, perceived risk related to market
25 prices and production of the wind farms or how

1 often the wind is going to blow; second, savings in
2 the first ten years after construction; third,
3 unknowns associated with closing Asbury; and
4 fourth, potential rate impacts. We think that the
5 Nonunanimous Stipulation & Agreement addresses each
6 of these items.

7 In regard to perceived risk, OPC has
8 described its concerns about risks of unknowns
9 associated with the project and argues that, as a
10 result, essentially Empire should do nothing in the
11 face of this available low-cost wind.

12 However, what they don't say is that
13 doing nothing also has a risk. Mr. McMahon will
14 tell you that under the status quo, customers are
15 exposed to more risk in the market over the long
16 term and the long run than under the stipulation
17 plan because customers will be more exposed given
18 the cost of buying fuel for traditional generation
19 plants.

20 Mr. McMahon oversaw extensive
21 modeling, including model runs that OPC requested,
22 that demonstrated that even if market prices are
23 low and there is a 50 percent increase of wind
24 generation in SPP, Empire's customers will still
25 save money over the current course of action or the

1 status quo.

2 Wind generation adds a low-cost
3 energy source. Almost all the costs of wind
4 generation are up front to build the projects.
5 Once built, there are no ongoing fuel costs like
6 with coal or gas. And in the case of wind, again,
7 because of the federal tax policy, someone else
8 will pay for a substantial portion of the cost to
9 build the wind projects. It's hard to ignore this
10 fact.

11 Again, I think it bears reminding
12 everyone that there is a risk in whatever avenue is
13 pursued, and that very much includes Empire's
14 existing preferred plan from the 2016 IRP. In
15 other words, even the status quo has risk. Doing
16 nothing ignores the availability and value of the
17 PTCs and forces Empire to remain exposed to the
18 market with a coal-heavy portfolio for many years.

19 The analysis performed in this case
20 indicates that -- well, there are two analyses.
21 First indicated that the customer savings plan as
22 well as the stipulation plan come with less risk
23 than the status quo.

24 Charles River Associates compared the
25 2016 preferred plan to the customer savings plan

1 under the base market price, low market price and
2 high market price scenarios, all using ABB price
3 forecasts, which are forecasts this Commission has
4 relied upon for years.

5 I think it's page 4 in the handout
6 that I gave you is a table summarizing the
7 comparison for the customer savings plan that's
8 found in the surrebuttal testimony of Mr. McMahon.
9 In this table you'll see a series of prices on the
10 left side over the designation 2016 preferred plan,
11 and then there's a set of essentially net present
12 values on the right side under the -- or over the
13 CSP or customer savings plan. Those are the
14 results of the runs again for the high market, the
15 mid and the low for each of those plans.

16 Mr. McMahon reran the same analysis
17 for the stipulation plan using 600 megawatts and
18 leaving Asbury on, which is shown in his affidavit,
19 and it shows similar results. That would be the
20 following page in our handout. Again, on the left
21 side are a series of dots there that are associated
22 with the 2016 IRP plan under the high, base and
23 low. On the right we have what's called here the
24 settlement plan or the stipulation plan showing the
25 results for the stipulation plan in those three

1 situations.

2 Not only does the stipulation plan
3 provide the lower cost in all three scenarios, but
4 the spread between the costs in the three scenarios
5 is much less for the stipulation plan, therefore
6 indicating less risk for customers. Again, that
7 makes sense because of the lack of market or the
8 certainty of wind's costs over time.

9 Fossil fuel plants, on the other
10 hand, tend to have significant fuel costs that are
11 a major expense throughout the plant's life. It's
12 for this reason that the stipulation plan does not
13 create a greater risk for Empire's customers.
14 The greater risk for Empire's customers come from
15 maintaining the status quo.

16 Another criticism heard is that the
17 GFSA failed to adequately consider the possibility
18 of negative prices in the market. Yet as
19 Mr. McMahon can explain, the possibility of
20 negative pricing events was explicitly modeled in
21 the GFSA analysis, including the risk of more
22 frequent and extreme events. Again, the modeling
23 showed that Empire's customers were significantly
24 better off with the addition of wind in the
25 portfolio.

1 Also, negative pricing is more likely
2 to occur in regions with high levels of
3 transmission congestion. The RFP responses
4 resulted in, again, short list of wind projects
5 that are all close to Empire's load, reducing the
6 risk of negative pricing. This is a very important
7 point that you certainly need to consider in your
8 deliberations.

9 A related criticism is the view that,
10 with the addition of wind generation, Empire will
11 be long on capacity. That is, that its owned
12 capacity will exceed the needs of its customers.

13 First, just because Empire has
14 capacity doesn't make that capacity the most
15 advantageous mix for its customers. By taking
16 advantage of the wind prices now, Empire can start
17 to transform its portfolio to a better mix for the
18 future.

19 The company will shift from a heavily
20 fossil portfolio with emission, fuel and capital
21 cost risk to a portfolio with strong environmental
22 attributes and much lower fuel and ongoing capital
23 costs. Again, based on the modeling, this can be
24 done while providing savings to the customers.

25 Second, it is known that two of

1 Empire's existing purchased power agreements for
2 wind will go away after the 600 megawatts would
3 come online in December of 2020, expiration of Elk
4 River Wind Farm in 2025 and the Meridian Way Wind
5 Farm in 2028.

6 These expiring contracts represent
7 more than 40 percent of the new capacity that will
8 be added under the stipulation.

9 Additionally, while the status quo
10 called for Asbury to potentially be in service
11 until 2035, its future remains very much in doubt
12 given that it gets dispatched by SPP less often
13 today than it used to.

14 The market price provision is another
15 portion of the stipulation that should provide
16 comfort for you and for customers. Before we start
17 to describe that provision, though, it bears to
18 mention that the stipulation plan is again
19 projected to bring benefits to the customers under
20 low, mid and high price scenarios.

21 However, to further address the
22 concerns of the parties, the company has agreed to
23 add the market price protection provision which
24 provides up to 35 million in protection for
25 customers if a worse case than what is projected by

1 the modeling is experienced. This provision was
2 developed with significant input from the Staff and
3 from the Missouri Energy Consumers Group.

4 Protection provision operates by
5 comparing the cost to acquire and operate wind
6 farms to the amount of revenue they generate each
7 year. Mr. Holmes can walk through the details of
8 the calculation.

9 Generally, a positive number will
10 indicate customer benefits. Customers will receive
11 the benefit of these revenues through either the
12 base fuel numbers in its rates or twice a year
13 adjustments to the fuel adjustment clause.
14 Customers receive the benefit of the protection
15 against negative values through a credit to
16 Empire's revenue requirement in subsequent rate
17 cases.

18 The treatment of Asbury in the
19 stipulation was a difficult -- was a difficult
20 issue for the company. The company had modeled
21 significant customer savings associated with the
22 retirement of Asbury. Asbury, in spite of its
23 various upgrades over the years, is still a
24 relatively small vintage 1970s power plant. As I
25 said, it gets dispatched less and less into the

1 market, yet customers are paying for all the costs
2 to operate it, which means maintaining and staffing
3 the plant. It is also possible, maybe even likely,
4 that it will need another 20 million in --
5 \$20 million invested now to meet environmental
6 regulations as of April of 2019. Additional
7 projected future investments are identified in the
8 GFSA.

9 However, Empire listened to the
10 concerns and reasoning of the parties, which
11 includes OPC and Joplin, and in the stipulation has
12 agreed to not retire Asbury immediately and will
13 relook at Asbury's status as we move forward and
14 more is known.

15 Lastly, there's been concern raised
16 about rate impacts of the stipulation. It's true
17 that in the first rate case after Empire acquires
18 the wind farms there will be a rate increase. It
19 is estimated that this will be a 12 percent
20 increase above current rates.

21 However, focusing on just this fact
22 ignores a couple of points. First, that percentage
23 is a comparison to today's rates only and does not
24 consider the portion of the 12 percent increase
25 that would be predicted to take place in that time

1 frame without the stipulation plan or, in other
2 words, utilizing the status quo. Thus, to the
3 extent anyone believes rates would be 12 percent
4 lower in the absence of the stipulation plan, they
5 are mistaken. The company calculates the
6 difference associated with the stipulation plan to
7 be approximately 3.4 percent.

8 Second, the situation turns around
9 very quickly. By 2024 there is no projected
10 difference in rates when comparing the status quo
11 and the stipulation plan.

12 Now, I know this differs from
13 allegations found in the OPC affidavits. However,
14 I would very much invite you to ask our witnesses,
15 Mr. McMahon, Mr. Holmes, Mr. Mooney, to comment on
16 those rate impacts in order to get a fuller picture
17 of this issue.

18 Empire's original concerns about
19 timing of the Commission's decision were driven by
20 two major factors: First, the federal tax law that
21 ramps down production tax credits on wind
22 generation; and two, the federal environmental law
23 related to the disposal of coal combustion
24 residuals.

25 The stipulation's approach of not

1 immediately retiring Asbury lessens the timing
2 concerns related to the second issue. However, the
3 federal production tax credits concern still
4 exists. In order to gain the full value of the tax
5 incentives, the wind generation must have completed
6 construction by the end of 2020.

7 Thus, Empire must continue to move
8 quickly to take full advantage of the PTCs and ask
9 that you would help us do the same. A Commission
10 decision by around June 30, 2018 would provide
11 sufficient lead time for Empire to meet this
12 deadline.

13 As I mentioned before, Judge, I'd
14 like go in camera just for a couple minutes, if we
15 could.

16 (REPORTER'S NOTE: At this point an
17 in-camera session was held, which is contained in
18 Volume 4, pages 48 through 52 of the transcript.)

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1 JUDGE BUSHMANN: Back in public
2 session.

3 MR. COOPER: To close, we certainly
4 believe that positive Commission action is
5 warranted in this case because the plan set forth
6 in the Nonunanimous Stipulation will produce
7 significant benefit to customers. Empire's
8 proposal to acquire wind generation at a
9 significant discount using the tax equity
10 partnership structure proposed in the plan will
11 benefit customers through lower future energy costs
12 without any negative Empire's -- any negative
13 impact on Empire's ability to provide these
14 customers reliable service.

15 The primary attacks of the Public
16 Counsel about their fears and unknowns will exist
17 in any wind project. That's why we model outcomes
18 and scenarios. Mr. McMahon, an experienced expert
19 on resource planning, has done extensive analysis
20 of the proposed acquisition of wind, including
21 running scenarios requested by Staff, MECG and OPC.
22 Based on that analysis, we're confident that the
23 approach taken in the stipulation actually reduces
24 exposure to market price risk for Empire's
25 customers.

1 The bottom line question I think is
2 whether you want resource -- wind resources
3 available and do you want wind resources in
4 Missouri? The answer is yes. This plan presents a
5 way forward that is well-reasoned and provides real
6 opportunity of significant upside benefits for
7 customers while mitigating downside risk.

8 Your decision we believe should adopt
9 the package of items presented in the Nonunanimous
10 Stipulation & Agreement, and I would thank you for
11 your time and consideration.

12 CHAIRMAN HALL: I am really
13 struggling to understand exactly what the company
14 is asking the Commission to do. Can you lay out
15 for me the specific findings that the company and I
16 guess the parties to the stipulation are asking the
17 Commission to find, or is that set forth somewhere?

18 MR. COOPER: Well, yes. There's a
19 couple of things. I think the first is, and I
20 mentioned it earlier, we would like -- and this is
21 really an accounting related, not really a finding
22 but conclusion. But we certainly want to be able
23 to record the capital investment to acquire the
24 wind projects as utility plant in service.

25 CHAIRMAN HALL: And let me stop you

1 there. So is that like a PSA mechanism? Is
2 that -- so the depreciation between the time that
3 the project is used and useful, between that point
4 in time and the date of new rates, the company will
5 be accumulating depreciation; is that correct?

6 MR. COOPER: Yes. So there's two
7 things. There's the first step, which is because
8 with the tax equity financing arrangement, there's
9 actually a wind project company that's the, sort of
10 the ground level owner, and a holding company, of
11 which Empire is the controlling member, that really
12 owns the projects.

13 So because of that situation, we're
14 looking for direction, first step just basically to
15 be able to put that on our books as utility plant
16 in service.

17 CHAIRMAN HALL: So that one I
18 understand. So PSA accounting for the acquisition
19 costs.

20 MR. COOPER: And you mentioned
21 depreciation. Yes, there's no wind depreciation
22 rate for the company today. So we've asked that
23 the Commission order a depreciation rate for that
24 to be utilized, I think as you mentioned, from the
25 time the projects go in service until such time as

1 some other depreciation rate might be set in a
2 future rate case. So those are there.

3 There are also some affiliate
4 transaction variances that are mentioned in the
5 stipulation as well.

6 CHAIRMAN HALL: Okay. I understand
7 those.

8 MR. COOPER: So those are sort of the
9 ask on the conclusion on the ordered side of
10 things.

11 The factual finding, I guess what I
12 would view to be a factual finding that you and I
13 discussed earlier I would view as an underlying
14 fact that we are requesting as a part of the
15 Commission ruling on those accounting decisions, on
16 the affiliate transaction decision.

17 CHAIRMAN HALL: The fourth issue that
18 you just mentioned, so you're asking the Commission
19 to make a determination, a factual determination
20 that it is reasonable for the company to acquire
21 and operate these -- these wind facilities?

22 MR. COOPER: Yes.

23 CHAIRMAN HALL: Okay. So that's it?
24 Those four things, that's all you're asking the
25 Commission to do?

1 MR. COOPER: Yes. Certainly in
2 conjunction with that, I mean, we have agreed to
3 and would want the Commission to adopt the other
4 provisions in the Stipulation & Agreement.

5 CHAIRMAN HALL: Adopt the other
6 provisions. Explain that to me.

7 MR. COOPER: Well, for example, we
8 would want the -- we talked about the market price
9 protection. We would want that to be a part of the
10 Commission's order. We would --

11 CHAIRMAN HALL: And the order would
12 say what?

13 MR. COOPER: I think the order could
14 say, could direct the company to adopt that. I
15 mean, it could be in a tariff, it could be however
16 someone wanted it to do, but certainly would adopt
17 the stipulation to that effect and make it a part
18 of the Commission's order that the company comply
19 with that provision.

20 CHAIRMAN HALL: Okay. Anything else?

21 MR. COOPER: Well, certainly the
22 moratorium. There's a variety of things in there
23 that I think fit in the same category as what we
24 just discussed with the market price protection.

25 CHAIRMAN HALL: So you're asking us

1 to order everything that's in the stipulation?

2 MR. COOPER: We are, yes, certainly.

3 CHAIRMAN HALL: Okay. If the
4 Commission were to disagree or find one of the --
5 one or more of these terms unreasonable, what does
6 that do to the agreement amongst the parties?

7 MR. COOPER: Well, certainly at this
8 point, because it's been objected to, it's a joint
9 position statement. So I don't know that it does
10 anything to the agreement itself necessarily,
11 but --

12 CHAIRMAN HALL: So the provision, for
13 example, where the -- where the parties agree to
14 not contest the need for the -- for these wind
15 projects or to not contest the --

16 MR. COOPER: Recovery of the
17 investment on Asbury?

18 CHAIRMAN HALL: Right. So is that
19 agreement still binding on the parties if -- is it
20 binding right now since it's been objected to?
21 Will it be binding --

22 MR. COOPER: I think the rule
23 specifically says it's not binding. Certainly I
24 think all the parties are continuing to utilize
25 that as their statement of position in the case.

1 I think it depends on whether the
2 project goes forward or not, Chairman. I think
3 that if the order were such that it allowed the
4 project to go forward, even if the Commission
5 didn't adopt the entire Stipulation & Agreement, I
6 think that those parties' agreements would still be
7 those parties' agreements, in my opinion.

8 CHAIRMAN HALL: Does the company have
9 a position on whether or not a CCN is required for
10 projects outside the state of Missouri but paid for
11 by Missouri ratepayers?

12 MR. COOPER: That's a big question.
13 We argued about that a few years ago the first time
14 that I guess post South Harper the electric CCN
15 rule was considered for amendment. I -- I
16 haven't -- I don't know what my client's position
17 is at this point in time.

18 I think there are good arguments that
19 the Missouri statutes may be different from some
20 other states' statutes; that even looking back at
21 the South Harper decision, the focus there is on a
22 geographic sort of question with CCNs siting, where
23 should it be sited, as opposed to an economic, even
24 though there's one sentence that I think refers to
25 an economic question.

1 But I think most of those decisions
2 focus on, again, geographic siting, which would
3 lead me to believe, well, maybe the Missouri
4 Commission is only interested by the terms of that
5 statute in projects located within the borders. On
6 the other hand, I guess if one interprets them to
7 be an economic, the CCN statute to be an economic
8 statute, then certainly I can see why it could
9 extend to projects in other states.

10 CHAIRMAN HALL: So is that why the
11 stipulation, which includes a provision that a CCN
12 will be required, to the extent it's required,
13 which I don't even -- so that --

14 MR. COOPER: Yeah.

15 CHAIRMAN HALL: Was that a way to
16 address that legal issue?

17 MR. COOPER: To some extent. It's
18 also the fact that the parties are aware of the
19 fact that there is an ongoing rulemaking that at
20 some point the -- I believe the current rule that's
21 being circulated would call for CCN applications
22 for projects outside the state of Missouri.

23 CHAIRMAN HALL: That is correct.

24 MR. COOPER: And certainly as a
25 practical matter, if that's the rule, this company

1 needs -- my opinion again, this company probably
2 needs to file an application because the timing is
3 such that they need to move forward and they need
4 the Commission's approval.

5 CHAIRMAN HALL: And that actually
6 segues right into my next question. Why isn't this
7 a CCN proceeding? Why wouldn't that have been the
8 most simple way to address this, just file for a
9 CCN, and then we could have made a decisional
10 prudence decision and you guys could be off and
11 running? Why -- this seems unduly complicated.

12 MR. COOPER: Well, it's timing. You
13 know, I talked about the timing and the timing of
14 the PTCs and the fact that the company's still
15 negotiating with the short list bidders. And so
16 certainly at the time this was filed, I could not
17 draw a line on a map to indicate where my
18 certificate should be. And it really is.

19 It's resulted from the need to move
20 forward on some parallel paths because of the PTC
21 timing initially because of the Asbury investment
22 timing and try to get some indications from the
23 Commission where they want to be in a way that
24 would allow us to move forward and complete these
25 projects to the greatest advantage for the

1 customers.

2 CHAIRMAN HALL: Let me just ask, and
3 maybe this is my last question, but the stipulated
4 rate moratorium until April 1st of '19, is
5 April 1st of '19 the early -- under the stipulation
6 the earliest that Empire can file tariffs or is
7 that the earliest that new rates can be in effect?

8 MR. COOPER: The former. It's the
9 earliest that they could file tariffs. It could be
10 at least 11 months after that before rates would go
11 into effect.

12 CHAIRMAN HALL: Okay. I thought of
13 another question. Do you have a witness who can
14 discuss the stipulation that was entered into in
15 Oklahoma and what bearing that might have on the
16 proceeding here?

17 MR. COOPER: That's -- yeah. That's
18 probably Mr. Krygier.

19 CHAIRMAN HALL: Okay. Thank you.

20 COMMISSIONER RUPP: Good morning.

21 MR. COOPER: Good morning.

22 COMMISSIONER RUPP: What is the
23 dollar amount difference of the decision to agree
24 to not close Asbury versus your original position
25 to close it?

1 MR. COOPER: The dollar amount
2 difference? I guess I'm going to pass on that to
3 Mr. McMahon, who will actually be our first
4 witness.

5 COMMISSIONER RUPP: Very good.
6 Secondly, your agreement to not close Asbury is
7 only good until when? The next rate case? The
8 next resource planning? How long is your
9 commitment to OPC and Joplin not to close it?

10 MR. COOPER: The commitment really is
11 to not close it today, and that doesn't mean that
12 it's -- tomorrow it could be. Certainly what the
13 company has said is it will relook at it in future
14 resource planning exercises, which do come up next
15 year. We do something every year, but come up next
16 year, but certainly would be a part of a future
17 process.

18 So I can't tell you that there is a,
19 oh, yes, it's going to stay on until X day, but
20 certainly it's not something that's happening now
21 and is something that will be looked at in resource
22 planning.

23 COMMISSIONER RUPP: Besides OPC and
24 Joplin, was there anyone else that in your
25 negotiations wanted --

1 MR. COOPER: Asbury left open? Staff
2 and MECG, both of which can probably discuss that
3 issue as well, but yes, there were others.

4 COMMISSIONER RUPP: How key was that
5 piece of the stipulation to the agreement being
6 hatched?

7 MR. COOPER: Really wanting to peel
8 back the curtain on the stipulation.

9 COMMISSIONER RUPP: I'm just really
10 curious why Asbury is being advocated to stay open.

11 MR. COOPER: Well, I think -- let me
12 answer it this way, going back to my prior answer.
13 There were several parties that were interested in
14 it staying open.

15 COMMISSIONER RUPP: So I can just ask
16 every party their own position rather than asking
17 you to speculate on their --

18 MR. COOPER: I probably shouldn't --
19 yeah, I probably shouldn't speak for any of the --

20 COMMISSIONER RUPP: I will ask that
21 of all the other parties.

22 JUDGE BUSHMANN: Mr. Cooper, I have a
23 question.

24 MR. COOPER: Yes, sir.

25 JUDGE BUSHMANN: In your opinion,

1 what do you think the appropriate legal standard is
2 that the Commission should use in evaluating the
3 plan and the settlement plan?

4 MR. COOPER: Well, I think it's
5 public interest. Is it in the public interest?

6 JUDGE BUSHMANN: Is there anything in
7 the statutes that you're aware of that would
8 provide that support?

9 MR. COOPER: I can't cite to it
10 standing here, but we will certainly make that a
11 part of our brief.

12 JUDGE BUSHMANN: That would be a good
13 idea, and I would encourage other parties to do
14 that also. Thank you.

15 MR. COOPER: Thank you.

16 JUDGE BUSHMANN: Next opening would
17 be by Renew Missouri.

18 MR. LINHARES: Thank you. Good
19 morning. May it please the Commission? My name is
20 Andrew Linhares. I'm representing Renew Missouri
21 Advocates in this case, and I'm pinch hitting for
22 our attorney Tim Opitz, who is returning from
23 Hawaii today. He'll be back for the hearing
24 tomorrow.

25 So Renew Missouri was a proponent of

1 the Empire District's savings plan as originally
2 proposed in this case. We supported that plan
3 because it would bring online substantial new wind
4 generation and result in very significant customer
5 benefits while retiring Asbury, a coal plant that
6 is no longer economical under many analyses, and in
7 a way that would not harm ratepayers. And we
8 reflect that support in the rebuttal testimony of
9 James Owen and our statement of position filed on
10 April 4th.

11 Now, that being said, Renew Missouri
12 is a signatory to the Nonunanimous Stipulation &
13 Agreement filed on April 24th. So our joining in
14 that stipulation supersedes our previous position
15 statement. And while we didn't file an affidavit
16 in support as many other parties did, as many other
17 signatories did to that stipulation, I thought it
18 prudent to indicate our strong support for that
19 stipulation here today.

20 So Renew Missouri encourages the
21 Commission to approve these plant investments
22 reflected in the stipulation by issuing an order
23 according to the parameters in that stipulation and
24 as counsel for Empire just outlined. Also
25 instructive are the attachments and affidavits

1 filed by Empire, MECG and the Commission Staff.

2 So the negotiated terms in that
3 stipulation we believe represent incremental change
4 in the right direction, and they serve to address
5 the objections of some of the parties to that
6 original plan.

7 So the stipulation would bring online
8 600 megawatts of new, cheap wind generation, some
9 of which is guaranteed to be located in Missouri,
10 with all the associated local jobs and other
11 economic benefits.

12 It provides a path for some customers
13 to meet their renewable energy goals. Paragraph 20
14 of that stipulation commits the company to
15 implementing a program allowing nonresidential
16 customers to receive renewable energy credits from
17 wind projects. And we know that more and more of
18 Empire's business customers are demanding access to
19 renewable energy every single day.

20 Furthermore, this stipulation will
21 still result in substantial customer benefits for
22 Empire's ratepayers. As James McMahon, his
23 affidavit in support of the stipulation notes, the
24 wind projects will result in customer savings
25 relative to Empire's 2016 IRP preferred plan. This

1 is because the levelized cost of new wind is lower
2 than the forecasted price paid for energy in
3 Southwest Power Pool.

4 Finally, this stipulation will result
5 in returning money back to ratepayers due to the
6 federal Tax Cut and Jobs Act. So while the
7 stipulation is a compromise, benefits are still
8 very real and they represent progress.

9 We urge the Commission to approve the
10 Nonunanimous Stipulation & Agreement and to allow
11 Empire to invest in this growing resource in order
12 to take advantage of this unique tax equity
13 opportunity which we believe can save customers
14 money, create jobs, to grow local economy and move
15 toward a cleaner and more diverse resource mix.

16 Now, the parties have waived
17 cross-examination for Mr. Owen, and the Commission
18 indicated that they had no question for him, so
19 he's not present today. However, I am happy to
20 answer any of your questions for Renew Missouri
21 here today.

22 CHAIRMAN HALL: No questions. Thank
23 you.

24 COMMISSIONER KENNEY: No questions.

25 COMMISSIONER RUPP: Good morning.

1 MR. LINHARES: Good morning.

2 COMMISSIONER RUPP: So does Renew
3 support keeping the Asbury coal plant open and
4 operating?

5 MR. LINHARES: Certainly we would
6 prefer to see that plant close, but we believe that
7 this stipulation, as I said, it represents
8 progress, and I think the -- you know, as a part of
9 a negotiated stipulation, sometimes that's the way
10 things work. I mean, although Empire may not be
11 retiring that plant today as a result of an order
12 in this case, there are going to be opportunities
13 in future rate cases, in future IRP cases to weigh
14 whether to close that plant.

15 I think the long and short is that,
16 as counsel for Empire pointed out, Asbury's future
17 is very much in doubt because it's simply not being
18 dispatched as much as it used to be, and that's
19 certainly not going to change. We don't see any
20 reason to see why that would change. So I think as
21 a -- as a compromise, we are signatories to this
22 stipulation. We support the terms in it.

23 COMMISSIONER RUPP: So if Asbury
24 needs an additional \$20 million of upgrades to meet
25 certain requirements, do you think that is a

1 prudent use of ratepayer money?

2 MR. LINHARES: I think the Commission
3 and parties should look very carefully at that.

4 COMMISSIONER RUPP: Is there
5 something in this stipulation that the parties
6 would not challenge any upgrades to Asbury if there
7 is a requirement?

8 MR. LINHARES: Given that there's --
9 so there's an objection to this stipulation and it
10 does represent a joint position statement of the
11 parties, and certainly if the Commission were to
12 approve this position, this stipulation with
13 modifications, then there's specific verbiage in
14 here that essentially lets the parties off the hook
15 and allows them to take whatever position they'd
16 like.

17 But the terms in the stip do bind the
18 parties to support the stipulation unless there's a
19 modification by the Commission.

20 COMMISSIONER RUPP: So no
21 modification by the Commission, you guys wouldn't
22 object to the spending of \$20 million to upgrade
23 Asbury to meet certain regulations?

24 MR. LINHARES: Well, that's certainly
25 what we signed on to in this stipulation. I may be

1 wrong about how a nonunanimous stipulation
2 functions given objections, but I believe that's
3 what we signed on to.

4 COMMISSIONER RUPP: Great. Thank
5 you.

6 JUDGE BUSHMANN: Thank you. Division
7 of Energy.

8 MR. POSTON: Good morning. May it
9 please the Commission? I'm Marc Poston. I
10 represent Missouri Division of Energy.

11 The Division of Energy is a signatory
12 to the stipulation because we consider the 600
13 megawatt plan to be a step forward for Empire and
14 for the state of Missouri. It will help Empire
15 transition to a cleaner, more diverse generation
16 portfolio. It will also help support business
17 expansion, retention and attraction in Missouri due
18 to the increasing demand by corporate energy
19 consumers for renewable energy.

20 And residential customers also see
21 value in Empire's plan. I'd like to quote from a
22 comment filed on EFIS on February 9th by a
23 residential Empire customer, Ms. Sarah Oliver. She
24 says, I feel it is important for the Commission to
25 know that while probably everyone serviced by

1 Empire is concerned with our rates and where
2 funding will come from for the proposed wind farm,
3 there are also many of us that are very concerned
4 with ensuring our long-term environmental
5 sustainability. Wind being a renewable non-
6 polluting energy source is a major and important
7 change. We wholeheartedly support this.

8 The stipulation that's been filed is
9 the result of extensive negotiations by a number of
10 experienced energy professionals that relied
11 heavily upon modeling worst case scenarios and
12 including protections that address those risks.

13 The 600 megawatt plan takes into
14 account the varied interests of the signatories,
15 including the company, regulators, customers and
16 environmentalists. And while the exact locations
17 of the wind farms have not been determined, to the
18 extent this plan results in a new Missouri wind
19 farm, it will help the Missouri and local economies
20 through jobs, land lease payments, county permit
21 payments, property taxes and through reliance upon
22 local businesses for everyday support.

23 You'll hear concerns today that this
24 plan is risky, but please keep in mind there are
25 also risks in keeping the status quo, which we

1 consider to be a riskier path forward than the
2 proposal before you today.

3 The Division of Energy supports the
4 600 megawatt plan, and we hope you'll agree the
5 plan is reasonable and approve the stipulation.
6 Thank you.

7 CHAIRMAN HALL: No questions. Thank
8 you.

9 COMMISSIONER KENNEY: No questions.

10 JUDGE BUSHMANN: Thank you.
11 Commission Staff.

12 MS. FORCK: Good morning. May it
13 please the Commission?

14 The case before you today is complex
15 and unique with what seems like many issues and
16 positions. It began with an application filing in
17 which Empire requested approval of its customer
18 savings plan. The plan was generally to build up
19 to 800 megawatts of wind projects and to early
20 retire its Asbury coal facility.

21 Through three rounds of testimony,
22 various parties weighed in from all sides of the
23 issues expressing concerns with approval of the CSP
24 and expressing concerns with maintaining the status
25 quo. Five parties to this case were able to work

1 through negotiations to reach resolution on all the
2 issues to the case in a way that reasonably
3 addresses concerns for the utility, concerns for
4 consumer groups, concerns for renewable energy
5 advocates, and concerns for Missouri economic
6 development.

7 The stipulation upon which these
8 parties agreed is designed to address concerns
9 raised by all parties to the case, including those
10 that oppose it, and accordingly contain several
11 commitments. Generally, the stipulation provides
12 for building wind projects but lowering the
13 threshold from the original 800 megawatts to up to
14 600 megawatts, including a specific build
15 commitment for Missouri. It also provides for
16 keeping Asbury open and adds some terms related to
17 the federal Tax Cuts and Jobs Act of 2017.

18 Staff asks that the Commission accept
19 the Stipulation & Agreement in its entirety as a
20 resolution to all of the issues of the case. The
21 Commission should not make a prudency determination
22 in this case, but rather should agree that Empire's
23 decision to acquire up to 600 megawatts of wind
24 projects and to keep Asbury open under the terms of
25 the stipulation is reasonable. Following a

1 determination of reasonableness in this case,
2 Empire will proceed as contemplated in the
3 stipulation.

4 The stipulation -- the stipulated
5 agreement importantly includes numerous customer
6 protections, including first a process for the
7 signatories and Empire to agree on in-service
8 criteria for wind projects which are under
9 construction, under contract for construction;
10 second, agreement that any offset received by
11 Empire due to a decreased purchase price for the
12 new wind projects will flow back to customers;
13 third, agreement that Empire will not file its next
14 general rate case until on or after April 1st,
15 2019, and that the true-up period end no later than
16 five months prior to the operation of law date in
17 that case to help ensure sufficient time to verify
18 the in-service status of the wind projects prior to
19 reflection of those projects' costs in rates.

20 This section of the agreement also
21 requires that the capital structure and debt rate
22 values be used in the -- to be used in the next
23 general rate case proceeding must remain within
24 reasonable parameters. This helps ensure that
25 customers do not bear the burden in rates at any

1 negative financial impacts potentially resulting
2 from the CSP.

3 This section also requires that
4 capital provided by tax equity partners in relation
5 to the CSP will not be imputed into Empire's debt
6 or equity capital structure components for purposes
7 of setting customer rates.

8 The fourth customer protection is a
9 market price protection mechanism which is designed
10 to address the risk to customer savings during the
11 first ten years of the CSP. In general terms, the
12 market price protection mechanism provides that if
13 there's a financial detriment to the customers that
14 results from the plan, the shareholders will bear a
15 portion of that detriment up to a maximum exposure
16 of \$35 million in the Missouri jurisdiction. If
17 there's a financial benefit resulting from the
18 plan, customers get to keep that in its entirety.

19 Staff witness John Rogers can answer
20 any questions you may have about the details of
21 this mechanism.

22 And the fifth customer protection is
23 a most favored nations clause providing additional
24 customer protections should Arkansas, Kansas or
25 Oklahoma order additional conditions or concessions

1 that would be favorable to Missouri customers.

2 As part of this stipulation, Empire
3 agrees to submit an application for a certificate
4 of convenience and necessity consistent with
5 applicable Commission CCN rules.

6 The signatories agree not to contest
7 the need for the wind projects and to make a
8 good-faith effort to process the application
9 expeditiously and to request a Commission order
10 within 120 days of filing.

11 Similarly, if Empire uses financing
12 related to the acquisition of wind projects that
13 would encumber its franchise works or system as
14 described by Section 393.190, RSMo., Empire agrees
15 to request Commission authorization for that
16 financing, and signatories agree to make a
17 good-faith effort to process the application
18 expeditiously and request a Commission order within
19 120 days of filing.

20 Staff witness John Rogers can answer
21 any questions you may have as to the acquisition of
22 wind projects and why the Stipulation & Agreement
23 is reasonable.

24 In short, the analyses provided by
25 Empire related to various amounts of wind

1 acquisition proposed by wind developers in response
2 to Empire's RFP make it reasonable to conclude that
3 the 600 megawatts of new wind provided for in the
4 stipulation will have a ten-year present value
5 revenue requirement very close to that of a plan
6 involving 800 megawatts of new wind as originally
7 requested in Empire's application.

8 However, the all-in capital cost is
9 significantly lower for 600 megawatts than it is
10 for 800 megawatts of wind, which reduces customer
11 risks that the CSP won't perform as expected.

12 Staff supports the proposed
13 depreciation rate and use of plant in service
14 accounts recommended in Empire witness Dane
15 Watson's direct testimony for the reasons stated
16 therein. The depreciation rate is intended to be
17 applied to the wind projects from the point they
18 are found to be in service until Empire's next
19 general rate proceeding, at which point the rate
20 will be subject to further review.

21 Staff supports keeping the Asbury
22 coal plant in service until an appropriate
23 retirement date as indicated through the Chapter 22
24 analysis. This will require additional capital
25 investments to ensure continued compliance with the

1 coal combustion residual rule and the effluent
2 limitation guidelines, which will cause an increase
3 in annual revenue requirement for two to three
4 years.

5 However, keeping Asbury open is
6 expected to have value in the Southwest Power Pool
7 and to result in a lower annual revenue requirement
8 in every year from 2026 to 2047. Keeping Asbury in
9 service will result in an additional 186 megawatts
10 of reliable and dispatchable generating resource as
11 a hedge against the uncertain performance of the
12 600 megawatts of new wind resources provided for in
13 the stipulation and will avoid creating a stranded
14 asset by retiring Asbury 15 years earlier than its
15 current planned retirement.

16 Staff witness John Rogers is
17 available to answer any questions you may have
18 related to this issue.

19 The stipulation requires both Empire
20 and its non-regulated affiliates to open their
21 books and records to the signatories as necessary
22 to ensure compliance with the applicable Commission
23 rules and the stipulation.

24 Staff supports granting the variances
25 from the Commission affiliated transaction rule

1 recommended in the stipulation, and Staff witness
2 Mark Oligschlaeger can answer any questions you may
3 have related to that issue.

4 Finally, the stipulation requires
5 Empire to reduce its base electric rates by
6 approximately \$17.8 million effective October 1st,
7 2018. This amount represents Empire's current
8 quantification of electric cost of service
9 reduction associated with the lowered Tax Cuts and
10 Jobs Act federal tax rate.

11 Signatories have agreed that Empire
12 will defer on its books and records an estimation
13 of the amount of EADIT flow-back starting
14 January 1st, 2018, with such deferral to be
15 included in Empire's base rates at the time of its
16 next general rate case.

17 Staff supports all of the provisions
18 of the stipulation as being reasonable and
19 affording appropriate protections to Missouri
20 ratepayers while balancing the needs of Empire and
21 its equity partners.

22 Staff asks that the Commission accept
23 the Stipulation & Agreement in its entirety as a
24 resolution to all the issues to the case. The
25 Commission should not make a prudency determination

1 in this case, but rather should agree that Empire's
2 decision to acquire up to 600 megawatts of wind
3 projects and to keep Asbury open under the terms of
4 the stipulation is reasonable.

5 Thank you.

6 CHAIRMAN HALL: So is Staff asking
7 the Commission to make a decisional prudence
8 determination on the wind projects?

9 MS. FORCK: So I think similar to
10 Mr. Cooper's hesitation on using the word prudence,
11 I hesitate to call it decisional prudence. But the
12 distinction that he made is what Staff is also
13 requesting, that the Commission find the decision
14 itself to enter into these agreements and to build
15 the wind projects is reasonable and that -- set
16 aside for future cases the determination of the
17 prudence of costs of all the -- all the things
18 associated with building, aside from the actual
19 decision.

20 CHAIRMAN HALL: So Staff believes it
21 would be appropriate for the Commission to make a
22 finding that the decision was reasonable?

23 MS. FORCK: Yes.

24 CHAIRMAN HALL: Turning to page 7 of
25 the stipulation.

1 MS. FORCK: Sorry. Do you mind if I
2 grab it real quick?

3 CHAIRMAN HALL: That might be
4 helpful.

5 MS. FORCK: Thank you. Sorry. Thank
6 you. Page 7?

7 CHAIRMAN HALL: Correct. I believe
8 it's the first full sentence where it says, the
9 signatories agree to not contest the need for the
10 wind projects. Is need, is that the same need that
11 is a factor in the Tartan test?

12 MS. FORCK: Yes.

13 CHAIRMAN HALL: What about the other
14 factors?

15 MS. FORCK: They would still be up
16 for parties to potentially contest if they thought
17 that would be appropriate.

18 CHAIRMAN HALL: So the public
19 interest determination, that is -- the signatories
20 have not come to any agreement as to that factor?

21 MS. FORCK: That is not specifically
22 laid out in the stipulation. I think that -- and
23 I'm not going to speak for all parties on this, but
24 I think that it would be a tough argument for a
25 signatory to have agreed to these projects in this

1 case and then to come back during a certificate
2 filing and say that this is not in the public
3 interest or -- need is one of the items, too, but I
4 think there are certain criteria that possibly
5 could be contested. But I think that, being a
6 signatory to this agreement, it would be a tough
7 argument to make that the CCN should not be
8 granted.

9 CHAIRMAN HALL: Does Staff believe
10 that it is necessary for the Commission to make a
11 determination on the reasonableness of keeping
12 Asbury open or the reasonableness of the CCR
13 investment? Is that necessary for the customer
14 savings plan to go forward in Staff's view?

15 MS. FORCK: So you're asking
16 specifically Asbury and not the wind projects
17 themselves?

18 CHAIRMAN HALL: Right. Two
19 components. One, Asbury staying open, because I
20 think in your opening you specifically said that
21 you're asking us to make a determination that
22 keeping it open is reasonable. You didn't mention
23 the CCR investment, though, that is in the
24 stipulation. So I'm wondering, from your
25 perspective, how important it is that the

1 Commission make a determination on those two issues
2 as it relates to the customer savings plan going
3 forward.

4 MS. FORCK: I think that in order for
5 Empire to proceed with this project with confidence
6 that they will be able to recover the costs
7 associated with it, I think that a decision from
8 the Commission on the reasonableness of keeping
9 Asbury open as well as the costs associated with
10 those CCR investments would be necessary.

11 I think from Staff's perspective,
12 those determinations aren't necessary for Empire to
13 be able to legally proceed, but I think that it
14 would give them comfort -- I don't know if that's
15 the right word -- but in order to move forward with
16 this project and give them a little bit more
17 assurance that they'd be able to recover their
18 expenses associated with it.

19 CHAIRMAN HALL: And does Staff have a
20 witness that can respond to the Oklahoma
21 stipulation or should I ask you questions about
22 that?

23 MS. FORCK: Please don't ask me
24 questions about that. You know, honestly,
25 Chairman --

1 CHAIRMAN HALL: I'll go ahead and ask
2 you the question so that your witnesses can be
3 prepared for it. But I'm trying to understand
4 where -- and my understanding of the stipulation is
5 that the signatories expressly agree that the
6 retirement of Asbury is reasonable. And I'm trying
7 to understand, and maybe my information is wrong,
8 but if that is correct, I don't understand how to
9 reconcile that stipulation with what's going on in
10 this proceeding.

11 MS. FORCK: So you're saying the
12 Oklahoma stipulation, the signatories agreed that
13 the retirement is reasonable?

14 CHAIRMAN HALL: Right.

15 MS. FORCK: Well, I'm not sure what
16 all went into the discussions for that. I can tell
17 you that there were a lot of pieces that go into
18 the decision to keep Asbury open. I think that
19 Staff as a party could have gotten on board with a
20 stipulation that either retired Asbury or kept it
21 open depending on what the other conditions were.

22 So given that, I don't think it's
23 unreasonable for a party to have come to that
24 conclusion. I don't know what else I can -- what
25 more specifics I can give you. I know John Rogers

1 has done the analyses of the financial impacts of
2 both keeping Asbury open and closing, so he may be
3 one to talk about that.

4 CHAIRMAN HALL: Okay. And then
5 switching gears, does Staff believe that it would
6 be first legal and then second appropriate to
7 determine in this proceeding that the tax cut
8 should be made retroactive to January 1 as opposed
9 to taking it as of October 1?

10 MS. FORCK: I think -- those are two
11 different questions. You know, I'd have to -- I'd
12 have to go back. I know that I'd hesitate to say
13 that it's legal to bring it back, but I would have
14 to do a little bit further research on that to know
15 what my position or what Staff's position would be
16 on that, and I can certainly provide that in the
17 brief.

18 As far as reasonableness, I think
19 that Natelle Dietrich would probably be the
20 appropriate witness to answer what Staff's position
21 would be on that.

22 CHAIRMAN HALL: Thank you.

23 COMMISSIONER KENNEY: No questions.

24 COMMISSIONER RUPP: So what I heard
25 you say was that Staff would have been okay with

1 closing Asbury with some -- with maybe a caveat of
2 something or other. What was the caveat of
3 something or other that would have gotten you
4 there?

5 MS. FORCK: Well, I'm not going to go
6 quite so far as to say would have. I'll redirect
7 that to say could have. And like I mentioned,
8 Staff witness John Rogers had done a lot of
9 analyses looking at the financial impacts, and
10 offhand I know that there were some comparisons
11 that showed keeping Asbury open didn't make a huge
12 impact either way financially as far as customer
13 savings. It didn't yield some exorbitant amount of
14 customer savings, nor did it significantly bring
15 them down.

16 So given what, I mean, I don't know
17 that Asbury was a very strong sticking point one
18 way or the other for Staff.

19 COMMISSIONER RUPP: Okay. Thank you.
20 You also mentioned, you know, not having a stranded
21 cost. Tell me why that is important if I have
22 something that's very inefficient and, yeah, maybe
23 I haven't extracted all the dollars out of it, but
24 why is it important in Staff's position to avoid
25 having a stranded asset?

1 MS. FORCK: I think generally Staff
2 doesn't like causing ratepayers to pay for
3 something that is no longer providing any service.
4 So what the original ask was from Empire was to
5 allow continued recovery of and on the Asbury
6 facility despite its closing, so I think
7 particularly the return on piece of that.

8 But I think if possible Staff likes
9 to try and allocate those costs up until the actual
10 retirement date and not continue, if possible, not
11 continuing having ratepayers who aren't receiving
12 any benefits of an asset paying for that asset.

13 COMMISSIONER RUPP: Okay. I'll save
14 the rest for Mr. Rogers. Thank you.

15 MS. FORCK: Thank you.

16 JUDGE BUSHMANN: Thank you.

17 MS. FORCK: Thank you.

18 JUDGE BUSHMANN: MEGG.

19 MR. WOODSMALL: Good morning. David
20 Woodsmall appearing on behalf of the Midwest Energy
21 Consumers Group.

22 As an initial matter, I noted the
23 Chairman said that he didn't like interrupting
24 opening statements, but I would invite you to do it
25 here. I really would. Rather than me try to tell

1 you the things that I think you want to hear, I'd
2 rather have you tell me the concerns you have and I
3 address the things that you actually want to hear.
4 So please interrupt me.

5 Again, David Woodsmall on behalf of
6 the Midwest Energy Consumers Group. By now you've
7 probably noticed that MECG is a signatory to the
8 Nonunanimous Stipulation. Recognizing that two
9 other customer groups in this case, OPC and the
10 City of Joplin, are opposing the settlement and in
11 light of the fact that MECG initially filed
12 testimony in opposition to Empire's application, I
13 feel the need to explain the sudden change in
14 MECG's agreement.

15 First I want to point out the
16 diversity of the interests that support the
17 stipulation. First you have utilities. You have
18 Empire supporting it, but you also have Ameren who
19 is not opposing it. You have customers, MECG. You
20 have Staff, who is supposed to be objective, and
21 they support it. You have environmental interests,
22 Division of Energy. You have economic interests.
23 I'm sorry. Economic interests being the Division
24 of Energy. Environmental interests being Renew
25 Missouri. Heck, you even have Sierra Club who's

1 not opposing it. So every interest across the
2 spectrum has either supported this or not opposing
3 it. So please keep that in mind.

4 You mentioned the standard that
5 should be assessed. Looking at the Commission's
6 IRP rules, now, this isn't an IRP case, but it's
7 most analogous to the IRP. That uses the public
8 interest standard. So certainly the broad nature
9 of the interests represented as either supporting
10 or not opposing tends to lean towards a finding
11 that this is in the public interest. I'll address
12 the appropriate standard when we get to the briefs.

13 As I said, you may have noticed the
14 significant change in direction that MECG is taking
15 in this case. As reflected on this slide, MECG
16 initially opposed the Empire application. This is
17 a statement from MECG's position statement filed on
18 April 4th, and in this we stated that one of our
19 concerns was lack of tangible benefits to the
20 customers.

21 So this was April 4th. By
22 April 24th, less than three weeks later, we were on
23 board. We now support the stipulation. And here's
24 a statement from the stipulation which now
25 represents MECG's joint position.

1 So why the sudden change? First it's
2 important to recognize the difference in what was
3 being requested. Primarily what Empire was asking
4 for, in its initial application Empire's
5 application focused on prudence, and that suddenly
6 changed. Empire is no longer focusing on getting a
7 prudence decision from the Commission but rather a
8 reasonableness decision.

9 And I'm going to divert from my
10 prepared opening statement and try to address some
11 of the concerns I've heard. It's important to
12 recognize what that difference is. Prudence,
13 decisional pre-approval slams the door. You have
14 made a decision. No one can come back later and
15 challenge it. That is what pre-approval does.
16 That is what your finding of prudence does. It
17 basically says no one can come along later and do
18 anything on this.

19 That's not what we're doing here. I
20 could not agree to that. That is not the law as I
21 view it. What we're asking for is reasonableness.
22 An important part of that, the distinction is
23 Public Counsel, Joplin, other parties can come
24 forward later and challenge the prudence. You
25 haven't slammed the door shut on that.

1 So we're asking you to simply make a
2 finding of reasonableness, but we do not go as far
3 as prudence because you have to maintain your role
4 as the decision-maker in a prudency challenge.
5 So keep that in mind. That's how I view the
6 distinction, and that's why we were willing to get
7 on board because it is simply a reasonableness
8 decision and not a prudency decision.

9 And where does that come from? That
10 comes -- Mr. Cooper talked about a Missouri
11 American case, and initially -- and I'm on I guess
12 slide No. 5 here. Slide No. 6. In that Missouri
13 American case from 1997, Missouri American asked
14 for a prudency decision as well.

15 The Commission, based upon objections
16 from certain parties, would not go so far. In
17 fact, it said it did not do decisional
18 pre-approval. But the Commission made certain
19 findings that gave a comfort level, and it said
20 that the decision is a reasonable alternative. But
21 prudency could be challenged later.

22 So that's what we're asking for here.
23 You've done it in a Missouri American case, and I'd
24 ask you to do it here.

25 I want to be very clear about MECG's

1 willingness to take these steps in this case.
2 Unlike Ameren and KCP&L, Empire faces some
3 challenge simply by way of its small size. Risks
4 that may be easily assumed by Ameren and KCP&L and
5 large utilities cannot be so easily assumed by a
6 company the size of Empire. So MECG is more
7 willing to work to help a company the size of
8 Empire to solve these challenges.

9 Bottom line, I hope you realize that
10 despite assertions by others in the Capitol
11 primarily, industrial customers are willing to work
12 with the utilities when we have a clear explanation
13 of what the problems are and what the potential
14 benefits are. We sat down with Empire. Those were
15 all explained. We worked through them, and MECG
16 was willing to help solve those problems. So that
17 is what we did here.

18 Slide 7. So what are the benefits to
19 the customers? I talked about we were willing to
20 get on board because there were benefits explained
21 and we were able to get reduced to writing. So
22 what are those benefits?

23 In light of some concerns about
24 future wholesale energy prices, the settlement
25 provides for the implementation of a market price

1 protection mechanism. That mechanism seeks to
2 provide a sharing of risk between shareholders and
3 customers associated with reduced market prices and
4 wind production.

5 Based upon analysis conducted by the
6 signatories, and Greg Meyer was very involved in
7 this, we view the worst case scenario would subject
8 customers to a downside risk of \$32 million over
9 ten years.

10 What does the market price protection
11 mechanism do? What it does is it compares the
12 revenues generated by dispatching energy into the
13 SPP, what are the revenues generated and what is
14 the revenue requirement. And if that's positive,
15 we know the revenues are covering the costs. If
16 it's negative, then we know revenues aren't
17 covering cost.

18 And again, we viewed that the worst
19 case scenario over ten years was \$32 million of
20 downside to customers. The market price protection
21 mechanism provides \$35 million worth of coverage.
22 So in our view, that was a significant mechanism to
23 cover risk for customers.

24 And again, several witnesses can talk
25 about this. Mr. Holmes for Empire was very

1 involved, John Rogers on behalf of Staff and Greg
2 Meyer were all involved and can answer any
3 questions about how the market price protection
4 mechanism works and how it covers the risk going
5 forward.

6 Next, the settlement contains a
7 provision that ensures that the benefits of federal
8 corporate tax reduction are flowed back to
9 customers. Specifically, Empire will reduce rates
10 by over \$17.8 million effective October 1, 2018.
11 This removes a large uncertainty for Empire
12 customers.

13 There's been a fight going on.
14 You've noticed it. You've noticed a hearing up for
15 later in May to talk about whether an AAO would be
16 appropriate. This takes care of the concern that
17 customers are going to get these tax benefits
18 effective October 1.

19 It leaves open the question of what
20 happens pre October 1. This was a question from
21 the Chairman. That decision -- or that issue I
22 think may be addressed in some fashion depending on
23 legislation. If legislation is passed, I think
24 that question is answered. If legislation isn't
25 passed, I'm sure there's going to be another fight

1 with other utilities. But that issue remains open.

2 Slide 9. The settlement provides for
3 a rate case moratorium, and Mr. Cooper talked about
4 this. It basically says that Empire will not file
5 tariffs to increase rates before April 1, 2019. So
6 that means under an 11-month timeline rates will
7 not change until March 2020.

8 Since Empire's last rates went into
9 effect in September of 2016, rates will not have
10 increased for over three and a half years. Now, I
11 say will not have increased. We have the tax
12 reduction. So for three and a half years customers
13 will see stability in rates.

14 Additionally, there are certain
15 protections that are built in regarding the rate
16 cases when these wind assets are put into rates.
17 First it says that the case has to be timed so that
18 there are five months in order -- between the
19 true-up date and the operation of law date so the
20 parties can do a true-up and make sure that these
21 assets are actually in service. We wanted to make
22 sure that it wasn't squeezed too tight. This was a
23 provision that was in the Empire and KCP&L Iatan 2
24 regulatory plans, and we adopted it here.

25 Next there are provisions regarding

1 capital structure and cost of debt. The concern
2 being in my mind that if Empire went out and
3 financed this all with debt, would their debt --
4 would their credit rating go down and debt costs go
5 up?

6 So this is a protection for customers
7 that the asset portion -- or the investment portion
8 made by Empire is done in a fashion that it's not
9 detrimental to customers.

10 Slide 11. There is a provision that
11 calls for Empire to propose a program in the future
12 for nonresidential customers to access renewable
13 energy and the associated renewable energy credits.

14 I want you to understand what's going
15 on here. Just because Empire and other utilities
16 use wind energy, they get the renewable energy
17 credits. So customers can't say that we're served
18 by renewable energy. You can only make that
19 statement if you have the RECs in hand.

20 So because Empire is served by wind
21 energy doesn't mean the customers can make that
22 statement. The only way a customers can make that
23 statement is if there is a program by which they
24 can access and get the renewable energy credits.

25 What this provision says is that

1 Empire in a future case will propose a program that
2 will make that happen. It will propose a program,
3 and questions regarding the costs for getting those
4 RECs are all left to the future case, but it will
5 allow a potential mechanism so customers can make
6 that statement.

7 And you might have seen when Amazon
8 put out its RFP for a second world headquarters,
9 one of the things they had in that RFP was for
10 parties to address sustainability of energy.
11 Amazon, Facebook, Google, Wal-Mart, companies of
12 this nature all have made commitments to being more
13 green, to sustainability. So these companies want,
14 they mandate that they have a program that allows
15 them to say that.

16 So the Empire provision will
17 hopefully allow a mechanism by which these
18 companies can say, we are being served by renewable
19 energy and we're meeting our sustainability
20 commitments.

21 I'll note that this is somewhat a
22 takeoff of what's being done with other utilities.
23 Ameren has its green tariff program currently
24 before you. That is a similar mechanism that
25 allows nonresidential customers to make this

1 statement. KCP&L and GMO in the context of their
2 current rate cases have a similar proposal. So
3 this is something on Empire's part to allow us to
4 move that way.

5 Slide No. 12. As mentioned by Staff,
6 the settlement provides a customer benefit in terms
7 of a most favored nation provision. Empire's
8 served by four ut-- by four commissions: Kansas,
9 Oklahoma, Missouri and Arkansas.

10 We didn't want a situation in which
11 simply because Missouri was one of the first movers
12 we got a worse deal than the others. I fully
13 expect the other states to jump onboard, piggyback
14 on what we've done and possibly extract other
15 benefits, and we didn't want to be shut out from
16 that.

17 So all this does is it says if
18 another state places a condition on this that is
19 beneficial to customers, we will append it to this
20 stipulation so we get those benefits. I think
21 that's a good deal. Otherwise, I would want to be
22 the last state moving.

23 And this might be a good --

24 CHAIRMAN HALL: Let me ask you a
25 question about that. My reading of the most

1 favored nation provision is that it only is
2 applicable if all the parties agree. So if one
3 party disagrees, and perhaps that would be Empire,
4 then you have to apply to the Commission to make a
5 determination as to whether or not the MFN applies.

6 MR. WOODSMALL: You're right. That's
7 correct.

8 CHAIRMAN HALL: So what would the
9 standard be for the Commission to apply in that
10 proceeding?

11 MR. WOODSMALL: I would think the
12 standard is simply whether it falls within this
13 language. If the Commission finds that it is a
14 customer benefit, then that's the standard.

15 CHAIRMAN HALL: And if Empire
16 disagreed with that interpretation, then that could
17 be appealed?

18 MR. WOODSMALL: Certainly.

19 CHAIRMAN HALL: But if this
20 Commission made a determination that it was a
21 benefit, you believe that that would essentially
22 modify whatever order comes out of this proceeding?

23 MR. WOODSMALL: That was my intent by
24 this provision.

25 CHAIRMAN HALL: Thank you.

1 MR. WOODSMALL: So slide 13. This is
2 the time to do something. MCEG has stated in
3 previous rate cases that Empire's industrial
4 electric rates are not competitive with the
5 national average. In fact, based upon a recent EEI
6 report, Empire's industrial rates are now almost
7 19 percent above the national average.

8 And I want to say first off, that's
9 not Empire's fault. Empire has small size. They
10 do not have the economies of scale. They can't go
11 out and on their own simply build an Iatan 2. They
12 don't have that scale. So there are certain
13 problems that cause their rates to be higher than
14 the natural average.

15 But simply maintaining the status quo
16 doesn't fix anything. So we looked at this as an
17 opportunity. To use a term that's repeatedly
18 thrown around the Capitol, MCEG and its members
19 view this as an opportunity to truly bend the cost
20 curve. While some may simply want to sit back and
21 wait and acquire facilities once they are
22 absolutely necessary, MCEG believes that we should
23 not waste the current opportunity.

24 The production tax credits provided
25 by the federal government are about to start

1 phasing out. They're not going to be at the
2 current level forever. They're \$24 and now is the
3 time to avail yourself of those tax credits.
4 Others are. If we don't do it, we're going to get
5 left behind.

6 While these tax credits are of little
7 value to Empire, or there's some value, they
8 provide a great deal of value to third parties.
9 And you see two things going on. You see the
10 production tax credits that I mentioned are at \$24,
11 but there's also accelerated depreciation. That
12 means that while a plant or these wind facilities
13 may have a 30-year life, and therefore you're
14 depreciating 3.3 percent a year, for tax purposes
15 the federal government allows you to depreciate
16 over five years. So you have accelerated
17 depreciation.

18 Well, what is depreciation?
19 Depreciation is an expense that allows you to have
20 less taxable income, so you pay less taxes.
21 Production tax credits do the same thing. So the
22 PTC, you see accelerated depreciation, allow you to
23 pay less in taxes.

24 Well, that's a big value to certain
25 parties out there, enough so that these parties, in

1 order to get these PTCs and the accelerated
2 depreciation, will pay to help build the wind.
3 They will pay to get the investment that drives the
4 PTCs and the accelerated depreciation.

5 So that is what drives the tax equity
6 partners. As mentioned in Mr. Mooney's testimony,
7 the PTCs and depreciation expense, quote, can be
8 used by owners to offset other sources of taxable
9 income realizing income tax savings.

10 And here you see that chart from
11 Mr. Mooney's testimony which shows what's
12 happening. The tax equity investors are going to
13 contribute 60 percent of the cost of the
14 investment. And what are they going to get out of
15 it? As mentioned, they get the PTCs, they get the
16 accelerated depreciation, and they get some of the
17 cash.

18 What does Empire get? They get the
19 remainder of the cash, they get all the capacity,
20 and they get the RECs. So now is the time. When
21 those PTCs go down in value, the tax equity partner
22 is not going to be willing to pay as much. So that
23 means customers are going to have to pick up more
24 of the investment. Now is the time to maximize the
25 benefit of using a production tax credit.

1 Given this opportunity and the review
2 that was conducted in this case, MECG is willing to
3 forego the opportunity to raise future prudency
4 challenge. In conduction with the other provisions
5 in the settlement, MECG believes that this project
6 should go forward. Therefore, MECG asks the
7 Commission to find that the agreement reached by
8 the five parties is reasonable.

9 Now I'm going to raise -- I'm going
10 to address some of the questions that were asked
11 earlier. Might not have wanted to hear my opinion,
12 but I'll throw it out there.

13 What are we asking for? Be very
14 clear about what the stipulation does. The
15 stipulation is really focused on two things. In
16 large part the stipulation is a private agreement.
17 It's an agreement between the five parties that
18 says certain parties will do certain things. And
19 as it applies to those five parties, the only thing
20 we're looking for from you is enforcement.

21 So when we say the parties find or
22 the parties agree to do certain things, you don't
23 have to -- you don't have to so much adopt those.
24 You just have to enforce it. It's like the KCP&L
25 and Empire regulatory plans. It's like any other

1 settlement that has life outside of a particular
2 case.

3 You can't bind future commissions, so
4 how do we get to make long-term commitments if you
5 can't bind future commissions? So what we're
6 saying is the parties agree to certain things here,
7 but the settlement is very clear when it says the
8 parties agree or the Commission finds. So focus on
9 the provisions and say, what is being agreed to
10 hear, things between the parties or things that
11 involve the Commission.

12 So there are certain aspects here
13 that are private agreements, but then there are
14 aspects that involve the Commission. And getting
15 to the Chairman's question from earlier, what are
16 those things? What findings are we needing here?

17 Well, one of them -- some of the easy
18 ones, a depreciation rate. Section 393.240 gives
19 you the authority to set a depreciation rate, and
20 in this agreement we're asking you to use that
21 authority and set a depreciate rate of
22 3.33 percent. That can be changed in the future
23 like any other depreciation rate. When we do a
24 depreciation study, that may change. But those
25 assets will start depreciating, and we need a

1 depreciation rate, so we ask you to set that
2 depreciation rate.

3 There are certain affiliate
4 transactions that are going to be involved here,
5 and I think Mr. Mooney, certainly Empire witnesses
6 can talk about what are those affiliate
7 transactions. We ask you to use your power under
8 4 CSR 240-20.015 to waive those affiliate
9 transaction rules.

10 But the other one is, we ask for a
11 finding that the direction we're going is
12 reasonable. As I said, not prudent. You get to
13 keep that authority for later. You have to.
14 Parties, Public Counsel can raise that later. So
15 all we're asking is kind of a nod to say, based
16 upon what we know now, you guys are headed in a
17 reasonable direction, but prudence is saved for
18 later.

19 CHAIRMAN HALL: Let me stop you there
20 because I'm still struggling, and I appreciate your
21 effort to address my struggle. The direction we
22 are going is reasonable.

23 MR. WOODSMALL: The direction we are
24 going.

25 CHAIRMAN HALL: The direction. I

1 mean, you're being very specific and helpful, and
2 then you go to the direction and I'm lost again.

3 MR. WOODSMALL: Okay. The direction
4 meaning the resource planning decisions that the
5 signatories are making. That is, the addition of
6 600 megawatts of wind, keeping Asbury open at this
7 time. We are being reasonable. You see nothing at
8 this point in time that causes you concern, but
9 prudence of those decisions can be made at a future
10 point in time.

11 CHAIRMAN HALL: So you mentioned two
12 things: One, keeping Asbury open; and then second,
13 the acquisition of the 600 megawatts. That's the
14 direction?

15 MR. WOODSMALL: Right.

16 CHAIRMAN HALL: So you're asking that
17 the Commission determine that those two items are
18 reasonable?

19 MR. WOODSMALL: Correct. And again,
20 going back to my previous statement that this has
21 private agreements and also agreements that involve
22 the Commission. Look on page 5, provision 14E.
23 The signatories agree not to contest and recommend
24 that the Commission find. This is one where it
25 involves the Commission. Provision -- on page 12,

1 provision 19B, same thing. The signatories agree
2 not to contest and recommend the Commission find
3 reasonable.

4 So those are agreements that involve
5 the Commission saying we find the direction you're
6 headed to be reasonable. So those are some of the
7 provisions that I talk about that involve the
8 Commission.

9 CHAIRMAN HALL: So the -- so there's
10 a third one that you mentioned, and that's the CCR
11 investment. So you've got the 600 megawatts,
12 you've got keeping Asbury open, and you've the got
13 the CCR investment?

14 MR. WOODSMALL: Right.

15 CHAIRMAN HALL: So those are the
16 three things that you believe that the parties are
17 asking the Commission to do?

18 MR. WOODSMALL: When I say to do, to
19 make a finding that, based upon what you know,
20 we're headed in a reasonable direction. Prudency
21 can be raised later. We're not taking away that
22 right of Public Counsel or the City of Joplin.

23 CHAIRMAN HALL: Anything else?

24 MR. WOODSMALL: Those are the
25 three -- I mentioned depreciation and affiliate

1 transactions, but those are the three that fall
2 within the reasonableness request that we're asking
3 for.

4 CHAIRMAN HALL: And so let's assume
5 that the Commission takes issue with one or more of
6 the terms in this Stipulation & Agreement and then
7 issues an order indicating that there's something
8 in here that it doesn't like, but it does say
9 depreciation rate 3.33, fine, affiliate transaction
10 variance, fine, reasonable on the three items that
11 you mentioned, but there's something else in here
12 that we don't like. Is this still an agreement
13 amongst the parties?

14 MR. WOODSMALL: Yeah. The
15 stipulation contains the standard language that
16 it's all interdependent, and if you make a change,
17 all bets are off.

18 CHAIRMAN HALL: So in other words, we
19 have to take this in toto?

20 MR. WOODSMALL: I wouldn't -- we will
21 take whatever you say and we will consider it.
22 This isn't a rate case. Be very careful. And I'm
23 not trying to take away your authority. You're the
24 policy makers. But this is one of -- in 25 years,
25 one of the toughest cases I've ever done. And if

1 you make a change, it is likely to open Pandora's
2 Box. It took a lot of work to get to this careful
3 settlement.

4 I'll mention the Asbury because
5 Commissioner Rupp has focused in on that. You make
6 changes on Asbury, let's think of what the
7 Pandora's Box is. The Pandora's Box then becomes
8 how do we quantify the regulatory asset associated
9 with that? That was a big issue. By keeping
10 Asbury open, we don't have to address that.

11 Another issue that was raised was how
12 do we take care of the employees down there? It
13 was raised by Division of Energy. If you say
14 Asbury needs to close, first off being, you have
15 the power to tell them Asbury needs to close.
16 That's a management decision. But if you say
17 Asbury needs to close, then we have an issue of
18 what happens with the employees. We were able to
19 avoid that issue. If you say Asbury should close,
20 we have an issue regarding the local property
21 taxes. We were able to avoid that.

22 So by leaving Asbury open for now,
23 we've been able to avoid some issues, and if you
24 make a pronouncement that Asbury has to close, it
25 really does open Pandora's Box. I will tell you as

1 others have --

2 CHAIRMAN HALL: Let me ask you this:
3 I'm going to use Commissioner Rupp's scenario that
4 he used a moment ago with a different attorney. So
5 let's say we approve this or we issue an order
6 consistent with this stipulation, and three months
7 from now Empire comes back and wants to close
8 Asbury and wants the undepreciated amount as a
9 regulatory asset. What are you going to do?

10 MR. WOODSMALL: Based upon the
11 information that I know now, I will oppose that.
12 It's a prudency decision that will have to be made
13 later. But Empire, as all utilities do, always has
14 the management discretion to retire units and add
15 generation. That is their discretion.

16 CHAIRMAN HALL: So then same
17 scenario, let's say three years from now, after
18 spending \$20 million for the CCR investment, then
19 Empire wants to close it and wants to recoup that
20 investment. What do you do then?

21 MR. WOODSMALL: There's two parts of
22 the question. First being will I oppose their
23 decision to close it? I don't know. We'll look at
24 what's --

25 CHAIRMAN HALL: That's not my

1 question, because I don't really care if you oppose
2 that. What I care is whether or not you're going
3 to oppose the company's effort to put in rates the
4 undepreciated amount.

5 MR. WOODSMALL: And that is one of
6 the things that I will talk about is one of the
7 private agreements. The signatories have agreed
8 that they will not oppose Empire's recovery of that
9 \$20 million. So when we get to that, if MRI's made
10 the investment in this \$20 million to meet CCR
11 compliance, I won't -- I can't oppose that.

12 CHAIRMAN HALL: And you can't oppose
13 it even if we -- okay. Can you oppose it if we
14 don't take the stipulation in toto, if we take
15 parts and view parts as unreasonable, or do you
16 think that the agreement amongst the parties is
17 still binding upon the parties?

18 MR. WOODSMALL: The agreement amongst
19 the parties is only binding to the extent that you
20 adopt everything we've asked for. If you make
21 changes, then all bets are off and I could make
22 challenges in the future.

23 CHAIRMAN HALL: Okay.

24 MR. WOODSMALL: And on the CCR
25 compliance, I want to be very clear. Simply

1 because we leave -- if Empire decided to close
2 Asbury tomorrow, there is still going to be certain
3 costs that they have to incur, and I'm sure an
4 Empire witness can talk about this, but there are
5 environmental costs they're going to have to incur
6 down there whether Asbury stays open or not. There
7 are incremental costs over and above that that they
8 will incur because Asbury is staying open.

9 So just if we closed Asbury tomorrow,
10 we're not avoiding all of these costs, is what I'm
11 saying.

12 CHAIRMAN HALL: Okay.

13 MR. WOODSMALL: So talking about
14 Asbury, that was a critical part of our agreement
15 here. And why was that? First off, it provides
16 fuel diversity. Do you really want to get to the
17 point where you're all coal, you're all wind,
18 you're all whatever? Asbury provides some fuel
19 diversity.

20 Asbury provide capacity value.
21 Parties are always out there looking to engage
22 bilateral contracts by which they can purchase from
23 each other capacity. So there may be opportunities
24 in the immediate future to engage in these
25 bilateral contracts. And then if SPP ever goes to

1 a capacity market, Asbury has value.

2 Long and short, Empire was initially
3 asking for customers to pick up all the costs of
4 Asbury. If we're going to be asked to pay those
5 costs anyway, it was our view that we ought to just
6 leave it open and get the potential value of it.

7 It is still in our view, and I think
8 in Staff's view and others, it was still an
9 economic plant. So just because it's generating
10 less doesn't mean it is completely uneconomic at
11 this point. So if it's economic and we are being
12 asked to pay for it anyway, let's leave it open for
13 now. We can always address that in IRPs. But
14 don't -- don't decide that it should be closed
15 without looking at all the potential benefits of
16 it.

17 The other thing I want you to
18 recognize with Asbury, this case is not simply
19 about Missouri. As I said, Empire serves in four
20 different jurisdictions. So any decision that's
21 made here may complicate things in other states.
22 And I mention that simply because the Kansas
23 commission staff also came out and said that Asbury
24 should stay open.

25 So if you come out with a

1 pronouncement that Asbury should close, are you
2 putting Empire in an impossible situation if Kansas
3 says Asbury should stay open?

4 So we basically just punted that down
5 the street a little bit and say, like any other
6 decision, we say -- like any other decision, it
7 will be treated at a future point in time. But
8 associated with that, I won't and the signatories
9 won't oppose recovery of the CRR investment.

10 The last thing I wanted to address
11 was some discussion about the CCN. You mentioned,
12 the Chairman talked about the certificate of
13 convenience and necessity. That is not -- and it
14 came about in context of whether Empire should have
15 just done this in the context of a CCN case.

16 First Empire, the timing wasn't right
17 because they haven't finished all the RFPs to do
18 that, but also a CCN isn't a prudency finding. CCN
19 is convenience and necessity, which to my knowledge
20 it doesn't involve you looking at all other
21 options. It just says convenient and necessary,
22 but it doesn't say were there other options you
23 should have done. So that prudency is done later.

24 So simply because there could have
25 been a CCN case doesn't address all the concerns

1 and rectify all the risks that would come from
2 making this investment decision.

3 The final thing I wanted to address
4 was a statement -- and I believe Mr. Cooper tripped
5 over this because of a word you used. You asked
6 whether we were agreeing to PSA, and that is not in
7 this agreement.

8 PSA is a method by which you avert
9 regulatory lag. If a utility makes investment
10 between rate cases, there is a time between when
11 that goes in service and when rates go effective in
12 which they are booking depreciation and not making
13 a return. PSA is a mechanism by which you are
14 allowed to capture the depreciation and the return
15 and recover it in a future case. We're not doing
16 that here.

17 There will be a period of time, five
18 months, in which this has been turned over to
19 Empire by the developer and is in service and they
20 will start depreciating they will not be making a
21 return. There will be regulatory lag. There is
22 nothing in here that addresses PSA. What it says
23 is parties, signatories agree that you should book
24 it to plant in service just like they do with any
25 other investment, but it starts depreciating and

1 there is no deferral of the depreciation and
2 return. And I'm sure Mr. Meyer, Mr. Krygier, any
3 number of people can talk about why this isn't PSA
4 and how PSA is different.

5 CHAIRMAN HALL: That was helpful. So
6 they would be able to book the depreciation, the
7 return of, but they would not be able to book the
8 return on?

9 MR. WOODSMALL: Right. Correct.
10 Yes.

11 CHAIRMAN HALL: Thank you.

12 MR. WOODSMALL: So I think I covered
13 all points, so that was all I had. Thank you.

14 CHAIRMAN HALL: One other final
15 question. So you represent some industrial and
16 commercial ratepayers in Empire District's --

17 MR. WOODSMALL: Correct.

18 CHAIRMAN HALL: -- service territory?
19 Who are they?

20 MR. WOODSMALL: Typically I don't put
21 that out because -- and I'll tell you why.

22 CHAIRMAN HALL: I'll tell you, I
23 mean, this has kind of been a longstanding issue
24 for me. You understand these issues extremely
25 well, and when you tell me, when you tell us your

1 views on things, it has weight and value. But when
2 we understand who is paying you to say these
3 things, it gives us context. It helps us
4 understand what you're saying and where you're
5 coming from. That's why I'm asking.

6 MR. WOODSMALL: First off, I'll start
7 with the caveat, some customers do not like -- in
8 the context of a rate case do not like to be seen
9 as opposing the utility. It's their monopoly
10 provider. You know, if you get out there and start
11 opposing ROE, would the utility really want to
12 start making programs like the non-residential
13 program to benefit you if you oppose their ROE?
14 Because you're a monopoly provider, it gives you
15 some hammer over the customers. So the customers,
16 a lot of them will tell me, I do not want you
17 mentioning my name in pleadings.

18 So, frankly, I get it. You see it as
19 customers hiding behind the MECG name and that's
20 what's happening. Here we're not opposing now the
21 utility. We are in agreement with the utility. So
22 I will tell you now who they are, but that changes
23 case to case. In some cases they won't let me use
24 their name. So let me see if I've got them all. I
25 think there's 11. Wal-Mart, Praxair, Jasper

1 Products, Tamco Building Products, Tyson, George's
2 Processing, Simmons Foods, Explorer Pipeline,
3 Marathon Petroleum. I've got nine of them.

4 But they are all customers -- as you
5 know, Empire has a limited industrial base. All of
6 these customers are served under Empire's large
7 prime-- or large power rate schedule. So they are
8 the vast majority of Empire's industrial base.

9 And you can see for purpose of any
10 point in time not who is involved in a particular
11 case but parties that support MEGC. If you go to
12 our website, there is a link that says
13 participating companies, and you'll see, I don't
14 know, 40, 50 companies there. That doesn't mean
15 those companies are involved in any particular
16 case, but I think I've rattled off the ones that
17 are involved in this case.

18 CHAIRMAN HALL: So are a number of
19 those companies interested in being assigned a
20 portion of the renewable energy credits?

21 MR. WOODSMALL: I haven't taken a
22 poll of which ones would actually do it. Those
23 terms will -- the terms that come with that program
24 will dictate who gets involved.

25 I can tell you from cases in Kansas,

1 the KCP&L case, the Ameren green power tariff,
2 Wal-Mart is very interested in this, very
3 interested. We filed testimony in support of
4 Ameren's proposal. So Wal-Mart's a customer of
5 Empire and will be interested in getting this
6 program in place.

7 But beyond the customers that are
8 current -- or beyond the current Empire customers,
9 there are other customers or potential customers,
10 like I mentioned, the Amazons of the world,
11 Facebooks, Googles. Those type of customers are
12 always looking to build facilities, fulfillment
13 centers, places to do their -- I don't know, their
14 computer banks. They want to find places where
15 they can say they're served by renewable energy.

16 So there are current customers that
17 want this, but there are other potential customers
18 that will want this, and we are precluding them
19 even looking at Empire because this isn't
20 available. So this is a big deal to all
21 nonresidential customers.

22 And on the Ameren side, it is
23 important to recognize that we have attempted to
24 structure these programs in other cases so simply
25 because nonresidential customers may be able to

1 access the RECs, it's being done in a way where
2 it's not intended to be detrimental to other
3 customers. I just mention that because it is a
4 live issue in the Ameren case, and I don't want to
5 go too far, but that was Wal-Mart's desire was to
6 make it not detrimental to other customers.

7 CHAIRMAN HALL: Thank you.

8 COMMISSIONER KENNEY: No questions.

9 JUDGE BUSHMANN: Thank you. Let's do
10 one more. Sierra Club.

11 MR. ROBERTSON: May it please the
12 Commission?

13 Sierra Club supported Empire's
14 original customer savings plan. We like plans that
15 put more clean energy on the wires and retire coal
16 plants. So we were less enamored of the revised
17 plan under the Nonunanimous Stipulation & Agreement
18 that cut back the amount of wind and leaves Asbury
19 running for the time being. We did not sign the
20 stipulation, but we do not oppose it. Instead, we
21 offered a measure of lukewarm support.

22 Old assumptions die hard. Some
23 people it seems still can't believe that wind
24 energy is cheaper than coal or natural gas even
25 from existing power plants. They can't believe a

1 grid can be reliable with a -- if it has a lot of
2 intermittent wind on it even though it is proving
3 that it can be reliable.

4 OPC objects that customers are being
5 ripped off because of the early benefits that flow
6 to Empire's tax equity partners. This overlooks
7 the fact that those tax equity partners are putting
8 up perhaps 60 percent of the capital, a share that
9 will not be added to rate base.

10 OPC assumes that SPP will not do its
11 duty to protect the reliability of the grid, that
12 the system will collapse like a house of cards
13 under the wind rush. There's enough diversity on
14 the system, though, to ensure reliability,
15 including natural gas which is close to half of
16 Empire's capacity, and the accredited capacity of
17 wind itself, 15 percent on SPP.

18 OPC objects that Empire has excess
19 capacity. The figures they give are 1,431
20 megawatts of SPP accredited capacity for a 1,211
21 megawatt peak load. That's not a huge cushion
22 given the reserve margin requirements. It might
23 look extravagant to build 800 megawatts of wind
24 with accredited capacity of 15 percent, but the
25 fact is it's cheaper.

1 We ask the Commission to approve the
2 revised plan in the Stipulation & Agreement. We
3 regard it as, if not a missed opportunity,
4 certainly a weakened opportunity. And we hope to
5 see Asbury retired sooner rather than later. No
6 one has refuted the case that Empire made that that
7 would be the best outcome for customers.

8 Questions?

9 CHAIRMAN HALL: No questions. Thank
10 you.

11 COMMISSIONER KENNEY: No, thank you.

12 MR. ROBERTSON: Thank you.

13 JUDGE BUSHMANN: Just to check, for
14 City of Joplin, do you have a lengthy opening or a
15 short one?

16 MS. BELL: It's fairly short, but my
17 position will be closely aligned with OPC. So if
18 you're looking to --

19 JUDGE BUSHMANN: This might be a good
20 time to break. All right. Why don't we -- as I
21 said before, because of the break later in the
22 afternoon, we're going to take an early lunch. So
23 why don't we do that now. Be in recess until
24 12:15.

25 (A LUNCH BREAK WAS TAKEN.)

1 JUDGE BUSHMANN: Let's go back on the
2 record. We were almost finished with opening
3 statements, and I believe our next one would be
4 from the City of Joplin.

5 MS. BELL: Judge, just a brief
6 procedural note. I had requested -- Mr. Edwards
7 has scheduling issues on Friday, and I had
8 requested whether or not the other parties had
9 cross questions, and I believe no one does have
10 cross questions. So at this time I'd request that
11 he be waived from appearing, be excused for Friday.

12 JUDGE BUSHMANN: Did you want to
13 actually introduce that affidavit into evidence at
14 this point?

15 MS. BELL: Sure.

16 JUDGE BUSHMANN: I believe that was
17 Exhibit 500.

18 MS. BELL: It was.

19 JUDGE BUSHMANN: Any objections to
20 the introduction of Exhibit 500 into the record?

21 (No response.)

22 JUDGE BUSHMANN: I don't hear any
23 objections, and I assume if the representation is
24 correct that there's no cross either. In that
25 case, Exhibit 500 is received into the record, and

1 Mr. Edwards is -- it is not necessary that he
2 appear on Friday.

3 (CITY OF JOPLIN EXHIBIT 500 WAS
4 RECEIVED INTO EVIDENCE.)

5 MS. BELL: Thank you. May it please
6 the Commission? My name is Stephanie Bell, and I
7 represent the City of Joplin in this matter, who
8 Joplin makes up about one-third of Empire's
9 Missouri ratepayers, ratepayers that will be
10 directly affected by the application before you
11 today.

12 Joplin agrees with MECG's original
13 statement of position that Empire -- that the
14 Commission lacks the authority to grant the
15 authorization Empire seeks today to record its
16 investment in costs to operate the wind projects.
17 The Commission is constrained by its statutory
18 authority, and that statutory authority does not
19 authorize the pre-approval sought by Empire here.

20 It's been argued today that there is
21 a difference between a finding finding something
22 reasonable and finding something is prudent. I
23 think that's a distinction without a difference.
24 We know prudence slams the door on the Commission's
25 authority, as has been said today. But if I call

1 it reasonableness, does it provide an opening?
2 What if I'm asking you to finding -- finding that
3 the wind projects are just and equitable? What if
4 I use the word sound? Again, I don't see any
5 statutory authority for a nod or a directional
6 guidance from the Commission.

7 The only case cited about a finding
8 of reasonableness was the American -- Missouri
9 American certificate case, and we've all agreed
10 today that this is not a certificate case.

11 CHAIRMAN HALL: Okay. So let me turn
12 that on its head. You say that there's nothing
13 that would specifically allow the Commission to
14 make that kind of determination. Is there anything
15 that would prohibit it?

16 MS. BELL: I am not aware of anything
17 that would prohibit it at this time. I'd be happy
18 to brief that issue for you.

19 CHAIRMAN HALL: It seems to me that
20 what you're really saying is that what they're
21 asking for may not have much value, not that we
22 can't do what they're asking.

23 MS. BELL: I think if -- in my review
24 of Mr. Woodsmall's original statement of position,
25 he outlined all the law about decisional

1 pre-approval and specifically provided that the
2 Commission's a creature of statutory authority and
3 that it can only exercise the powers which it has
4 been expressly granted. And so I think the fact
5 that there is not an express grant of that power,
6 because of the nature of the Commission itself, is
7 the reason why the Commission cannot go forward.

8 CHAIRMAN HALL: Okay. Thank you.

9 MS. BELL: And so when asked,
10 Mr. Woodsmall stated very matter of factly that
11 this Commission doesn't have the power to tell the
12 company to close Asbury, yet he maintained the
13 Commission does have the power to give the okay to
14 the wind facilities.

15 More importantly than the procedural
16 issues that abound in this case, Joplin's primary
17 concern has been, is, and will continue to be
18 ratepayer impact. Since 2006, ratepayers have
19 experienced increases in rates of 62 percent. You
20 will be hard pressed to find ratepayers whose
21 income has increased 62 percent since 2006.

22 As you know, these increases are
23 particularly difficult for low-income and elderly
24 ratepayers on a fixed income. Without this pending
25 application, ratepayers would actually be facing a

1 decrease in their rates for the first time in more
2 than ten years due to the Tax Cut and Jobs Act in
3 the near future. Instead, we are here today once
4 again facing the prospect of a substantial
5 increase.

6 Just over 18 months ago, this
7 Commission approved the merger case, and in that
8 case the testimony was that the -- there would be
9 no rate impact from the results of that
10 transaction, and here we are 18 months later back
11 before you today.

12 It's important to also note that,
13 among the public comments, over 75 percent of the
14 written comments oppose Empire's application. John
15 and Kerry divine wrote, I think this is a
16 tremendous waste of money and resources. It is our
17 money and we haven't even paid for the coal plant
18 yet.

19 Cathryn Loy wrote, our utilities are
20 too high in southwest Missouri. We cannot afford
21 to change with each new idea.

22 Cynthia Campbell writes, the more
23 this has been researched and studies, the more it
24 has become apparent that the residential and
25 business consumers in southwest Missouri are being

1 set up to foot the bill.

2 And Roy and Bev Winans write, our
3 main concern are the costs passed on to customers,
4 especially those on fixed incomes and those not
5 making a lot of money. Both groups operate on a
6 shoestring budget, and any additional cost is a
7 burden to them. We feel that they should take
8 priority.

9 You might have seen Bev Winans
10 before. A photograph of her made headline news in
11 the aftermath of the tornado that struck Joplin,
12 Missouri in May 2011. The F5 tornado killed 161
13 people, injured 1,100 others and destroyed 7,000
14 homes. The most deadly natural disaster in the
15 state's history inflicted \$2.2 billion worth of
16 damage. Rebuilding has come at a high price and is
17 ongoing, and Joplin is the largest urban area
18 served by Empire.

19 This history makes the risk the
20 company is asking the Commission -- or asking the
21 customers to bear even more significant.

22 So what is the rate impact? And
23 that's a really good question. Unfortunately, I
24 haven't seen any really good answers. It's clear
25 that OPC and the company differ, have differing

1 opinions about the potential rate impacts, but even
2 the signatories on the basis of their affidavits
3 disagree as to their rate impacts. So why? Why
4 can't we -- in other rate cases we get the schedule
5 and we say, you know, if this is what happens,
6 here's your bill number. If this is what happens,
7 here's your bill number.

8 So why are there so many
9 disagreements? And that's just because there's
10 numerous uncertainties associated with this
11 project. They are set forth in MECG witness
12 Mr. Meyer's rebuttal and in OPC's witness
13 Ms. Mantle's rebuttal, and they include items like
14 identification of the contractor for the wind
15 project, identification of a tax equity partner,
16 location of the wind projects, transmission costs,
17 market prices in the SPP market, generation mix at
18 SPP, and frequency of negative market prices, among
19 other things. The wildly different estimates about
20 rate impacts should give you pause.

21 While Joplin customers understand
22 Empire's need to make investments and improvements
23 and have paid for the same in the last several rate
24 cases, the undisputed evidence is that Empire has
25 all the capacity it needs to serve its customers.

1 Excluding Asbury, Empire's current generation
2 resources total 1,233 megawatts. Asbury has an
3 accredited capacity of 198. Combined, those are
4 well in excess of Empire's historical all-time
5 peak.

6 Allowing a company to take on
7 additional significant projects without regard to
8 the needs of the ratepayers is a slippery slope.
9 Where will you draw the line?

10 Empire is essentially asking the
11 Commission to allow them to make a bet with the
12 help of ratepayers that their projections will pay
13 off in the long term. Empire wants you to tell me
14 how to, as a Joplin ratepayer, how to invest my
15 money. They want me to help them invest it in wind
16 projects.

17 So imagine I'm a Joplin resident.
18 With the approval of this application, I invest my
19 additional 12 percent. I think that's the
20 projection from Meyer's affidavit, a 12 percent
21 increase. I invest that with Empire. They say I
22 will see a return on that in the long term. I
23 think some of the projections are the time when
24 customers start seeing a benefit is ten years down
25 the road.

1 So let's say instead I take that \$150
2 or whatever that annual increase is and I invest it
3 on my own and I put it in a money market. Am I
4 better off being required to make that investment
5 in wind projects or to be allowed to invest that
6 money how I see fit?

7 I did see some investment advice
8 recently that says if it takes you ten Excel
9 spreadsheets to convince yourself to own something,
10 then you shouldn't own it. And while we are
11 typically way past the ten sheets in the PSC, we
12 are seeming to have a lot of difficulties today.

13 First, the way in which this case was
14 brought not as a certificate case has presented
15 difficulties.

16 Second, we are having difficulties
17 today in determining what the signatories are
18 actually requesting. The stipulation itself
19 contains its own Excel spreadsheet and a multi-page
20 flowchart. You will see plenty more spreadsheets,
21 flowcharts and graphs today, tomorrow and Friday,
22 but I'd ask that you remember the price tag is big,
23 uncertainties abound, and the payoff even in the
24 best case is distant.

25 the courts have made clear that the

1 Commission's principal interest is to serve and
2 protect the ratepayers. This is not one factor of
3 a five-factor test. It's not a balancing. It is
4 the principal interest. The courts have said that.
5 And the Commission is charged with serving and
6 protecting the ratepayers, a serious duty that
7 helps balance the monopoly power utilities enjoy
8 over captive customers.

9 Doctors take an oath and they have an
10 interest in protecting the health of their
11 patients, but what's doctors' baseline? First do
12 no harm.

13 In Oklahoma with the Wind Catcher
14 project you see a do no harm provision in that
15 stipulation and agreement, and I suspect that's
16 because the commission has a similar charge as this
17 Commission to protect and serve ratepayers. This
18 do no harm provision is absent from the initial
19 application and is absent from the stipulation.

20 We ask that you dismiss Empire's
21 application first because it seeks pre-approval,
22 which the Commission is not authorized to grant,
23 and in the alternative we ask that you deny the
24 application for all of the reasons I stated today.

25 To address some of the questions that

1 have come up regarding Asbury, Commissioner Rupp, I
2 think you have been particularly interested in that
3 subject. We agree with some of the comments made
4 by Mr. Woodsmall, that one of the reasons to keep
5 Asbury open is because it does add diversity to
6 Empire's generation mix. And Joplin residents have
7 already paid for significant upgrades as recent as
8 the last rate case, and those upgrades have
9 significantly improved the efficiency of Asbury.
10 And I'm hoping you will sigh more evidence on that
11 as the hearing progresses.

12 It's also been suggested that keeping
13 Asbury open will require additional costs. I think
14 the numbers I heard today are 20 to 30 million.
15 First, these costs pale in comparison to the costs
16 we're talking about for wind projects with the
17 initial application \$1.5 billion as originally
18 proposed.

19 And second, that 20 to \$30 million
20 figure, it's my understanding that some of those
21 costs that are required to upgrade Asbury will be
22 required even if Asbury is closed, and there are
23 also additional costs associated with closing
24 Asbury. So those are just some of the reasons why
25 Joplin had to weigh and has thought about what the

1 impact of Asbury closing versus remaining open is.

2 CHAIRMAN HALL: No further questions.

3 Thank you.

4 COMMISSIONER KENNEY: No questions.

5 Thank you.

6 JUDGE BUSHMANN: Thank you.

7 MS. BELL: Can I go ahead and offer,
8 I have the public comments that I quoted in my
9 opening, and I just have them as Joplin 501. I'd
10 like to go ahead and offer them.

11 JUDGE BUSHMANN: Have you shown those
12 to the parties?

13 MS. BELL: I can pass them out now.

14 JUDGE BUSHMANN: Why don't you do
15 that and then we'll take that up at a later time so
16 they have an opportunity to review them.

17 Opening by Public Counsel.

18 MR. HAMPTON WILLIAMS: Good
19 afternoon. May it please the Commission? My name
20 is Hampton Williams on behalf of the Office of the
21 Public Counsel representing 172,000 ratepayers of
22 Empire District Electric Company that, as a result
23 of this application, will be exposed to at least a
24 12 percent rate increase resulting from the
25 Stipulation & Agreement, the proposal that is

1 propounded therein.

2 Just to give you an overview, I'm
3 first going to discuss a little bit about some of
4 the jurisdiction questions that have been asked
5 today. I'm then going to address some of the
6 modeling concerns that our office has raised. I'm
7 going to discuss what our valuation of the
8 ratepayer impact would be based off some of the
9 assumptions or the numbers that were provided by
10 the other parties. I'm also going to have a brief
11 comment about the federal tax issue, and I will end
12 with a brief statement about the Asbury plant.

13 So I would highly encourage as
14 questions come up, feel free to ask them. This
15 might take a little bit of time, but I appreciate
16 your indulgence.

17 This proposal supports the creation
18 of a separate corporate entity co-owned by one or
19 more tax equity investors to construct a \$1 billion
20 600 megawatt wind plant. This would add assets in
21 the share of Empire's assets to its rate base, and
22 Empire would then earn a return of and on that
23 asset.

24 The company claims that the
25 transaction will ultimately produce benefits to

1 ratepayers. I believe Mr. Cooper earlier
2 identified \$185 million over 20 years. However,
3 upon scrutiny, Office of Public Counsel believes
4 the plan to be unlikely to produce those purported
5 benefits.

6 Under the Stipulation & Agreement,
7 ratepayers are exposed to an increase of rate base
8 of \$380 million within the first ten years,
9 exclusive of additional exposures to risk.

10 I believe what the Commission is
11 being asked to do in this case is to declare what a
12 reasonably prudent utility would do, and what's
13 being offered is the company's modeling of this
14 proposal. And so based off the company's modeling,
15 which as I explained we have concerns with, that's
16 actually what's being put in front of the
17 Commission.

18 Is Empire seeking pre-approval? In a
19 data response Mr. Krygier stated, Empire's not
20 requesting pre-approval of the customer savings
21 plan per se -- that was the initial application --
22 but rather is seeking to support validation for its
23 proposed framework. In essence, the approvals will
24 provide a framework against which Empire could be
25 judged for prudence in a later case.

1 OPC believes that these are
2 semantics. This is a case about pre-approval.
3 This is a case about predetermination, because what
4 you're being asked to do is to prejudge on what
5 basis a company can act in the future.

6 CHAIRMAN HALL: Excuse me. So I
7 understand that you are opposed to pre-approval and
8 you also don't believe that we have the statutory
9 authority to do pre-approval. So then my question
10 is, if we go ahead and do pre-approval, how are you
11 harmed? Because you don't think we have the
12 statutory authority to do it, and so it will
13 essentially have no effect.

14 MR. HAMPTON WILLIAMS: Well, it would
15 have the effect in the event that should I have to
16 access my own resources to appeal a project or
17 appeal an order. That would be a personal issue.

18 But with respect I think your
19 question is what's the harm to ratepayers
20 generally, and I think ultimately this comes down
21 to what I will get to is what I think is a
22 limitation on the Commission's authority, that
23 should you grant the approval that's being sought
24 today, that would be invalid. We will have a
25 situation or circumstance in the future where the

1 company comes in with either a subsequent CCN case
2 or a subsequent rate case. They will assert your
3 order as evidence or proof positive of their
4 prudence of their costs, and at that point in time
5 that Commission is going to have to deal with
6 whether or not an order that may or may not be
7 lawful provided that.

8 Again, this goes back to an issue
9 that the Commission actually dealt with in a
10 rulemaking in EO-92-250. The Commission identified
11 four concerns with the pre-approval. First is the
12 problem of the potential of shifting technology and
13 demand risks from shareholders to ratepayers.

14 Second, the problem was -- is the
15 significant resources that are wrapped up in the
16 pre-approval process. That's not only resources of
17 the parties themselves but the Commission. And
18 this case I believe is proof positive of a case
19 that's gone on for multiple months. We
20 obviously -- all parties have applied considerable
21 resources for a case that actually will not
22 authorize the construction of anything.

23 The third issue that the Commission
24 identified was that the pre-approval is likely to
25 lock a utility into a plan approved by the

1 Commission. The fourth issue was once again the
2 utility may have less incentive to closely
3 scrutinize its costs.

4 In WA-97-46, which is the case
5 that -- it's the CCN case that Mr. Cooper alluded
6 to earlier, the Commission considered the express
7 question as to whether or not it had the capacity
8 to determine prudence of a proposed project prior
9 to construction.

10 Quoting the Commission, authority
11 exists supporting the position that the Commission
12 may not legally take any further action regarding
13 the pre-approval of a proposed project.

14 Capital City Water versus Public
15 Service Commission, the court said, quote, the
16 Commission's principal interest is to serve and
17 protect ratepayers, and as a result, the Commission
18 cannot commit itself to a position that, because of
19 varying conditions and occurrences over time, may
20 require the adjustment to protect ratepayers.

21 Similarly, in the Callaway nuclear
22 case, 27 MoPSC 183, the Commission stated, the
23 appropriate time for the Commission to inquire
24 regarding prudence of capital improvement projects
25 is a rate case in which the utility attempts to

1 recover the associated costs of a project.

2 The Commission continued in the 97
3 case saying, in regulation the monopoly
4 providers -- in regulation of monopoly providers,
5 one of the basic functions of the Commission is to
6 stand in the stead of competition. The Commission
7 performs this function principally in the context
8 of rate proceedings, authorizing recovery through
9 rates of only those costs that were prudently
10 incurred; that is to say, if they were spent as if
11 the utility was operating in a competitive
12 environment. This places the proper amount of risk
13 on the regulated utility to manage its decisions
14 and funds as if it were in an competitive
15 environment. The Commission finds that pre-
16 approval of the actual costs incurred in the
17 management of the construction proposed in this
18 project would upset that balance.

19 The Commission continued to
20 ultimately identify the pre-approval of the project
21 itself or the costs or how to complete that project
22 were inappropriate.

23 But it's also important to point out,
24 as Ms. Bell did, that that case was a CCN case.
25 That case was actually about the construction of a

1 project.

2 further, the Commission does not have
3 jurisdiction to make management decisions on behalf
4 of the company. Missouri case law states that the
5 Commission does not have authority to take over the
6 general management of the utility or dictate the
7 manner in which the company shall conduct its
8 business.

9 The Heartline versus Public Service
10 Commission, the courts identified that the exercise
11 of the management of the utility is a property
12 right which the Commission does not have
13 jurisdiction over. The court states that the
14 powers of regulation delegated to the Commission do
15 not have, however, clothe the Commission with the
16 general power of management incident to ownership.
17 The utility retains the lawful right to manage its
18 own affairs and conduct its business as it sees
19 fit.

20 In EO-2017-0065 Empire asserted its
21 corporate management discretion as a defense
22 against incurring tens of millions of dollars in
23 natural gas hedging losses. In that proceeding,
24 the fact that millions of dollars of hedging losses
25 were incurred and passed through the fuel

1 adjustment clause were not in dispute. OPC, Staff
2 and the company agreed that losses occurred.

3 In its initial brief Empire argued,
4 quote, Empire's management decisions are just that,
5 decisions of Empire's management, and they should
6 not be taken away from the company and placed in
7 the hands of the Commission or the Office of Public
8 Counsel.

9 So when convenient Empire will assert
10 managerial discretion as a defense to protect
11 shareholders. However, in this case Empire's
12 asking the Commission to take the place of
13 management, to make a management decision to
14 protect the interests of shareholders at the
15 expense of ratepayers.

16 Should the Commission determine that
17 it does not have the authority to grant
18 pre-approval or predetermination as many
19 Commissions have in the past, as I've got on this
20 slide here?

21 The Stipulation & Agreement should be
22 rejected and the application should be denied. If
23 the Commission decides to dismiss this proceeding
24 on jurisdictional grounds, such an order would not
25 have to speak to the construction of the excess

1 wind capacity nor the future of continued operation
2 of the Asbury plant. The company would be free to
3 exercise its own self-determination in either the
4 construction of the wind assets through subsequent
5 CCN applications or the continued operational
6 decisions of the plant itself.

7 The second concern related to the
8 application is a request -- jurisdictional concern
9 is a request to recover the remaining depreciation
10 balance of the Asbury coal generation facility.
11 Keep in mind in the company's initial application
12 they were seeking an accounting treatment to
13 recover not only the remaining depreciation assets
14 on the account but also a return on.

15 The corr-- and there's also a
16 corresponding condition to that in the Stipulation
17 & Agreement which is more narrow which talks about
18 the parties' ability to contest any investments due
19 to the CCR, the additional upgrades to the plant to
20 comply with the coal rule that is estimated to be
21 about \$20 million.

22 For the Stipulation & Agreement, the
23 agreement sought that no party would contest the
24 company's recovery of that amount. Now, the
25 problem with the application itself which is

1 seeking to recover that balance is that the -- it's
2 an unlawful request. The Missouri Supreme Court
3 does not permit continued rate base treatment for
4 generation assets after the plant is no longer in
5 use. City of St. Louis versus Public Service
6 Commission, the court said the abandonment of
7 property which is never replaced but is superseded
8 by another instrumentality, as gas lamps by
9 electric lights, or by the agency or another
10 company is an extraordinary supersession. It's the
11 loss of one -- its loss is one of the hazards of
12 the game. Just as the extraordinary increases in
13 values following the war was an unexpected gain, it
14 follows that the abandonment of property, lights,
15 service mains and the like, should not be
16 considered for the purposes of determining annual
17 depreciation reserve.

18 In the application the company seeks
19 rate base treatment for the outstanding
20 depreciation life of Asbury. In the Stipulation &
21 Agreement the parties are recommending or I guess
22 agreeing to recommend to the Commission continued
23 recovery of any of the investments necessary to
24 comply with the coal rule.

25 The problem with that recommendation

1 would be that if the company moves to shut the
2 plant down early, that recommendation would be in
3 violation of the Supreme Court.

4 Now, should the Commission determine
5 that it has jurisdiction over the application, over
6 the Stipulation & Agreement, Public Counsel
7 recommends that the Commission deny the application
8 on the basis that there's no utility service
9 justification for the construction of additional
10 plant assets; second, that the revenue modeling
11 offered in support of the proposal is unreliable
12 and insufficient; and third, that ratepayers will
13 be exposed to substantial rate increases as a
14 result.

15 The Commission's purpose is to
16 prevent economic waste. To paraphrase the
17 Commission on the role of competition and its
18 purpose recently stated in the electric vehicle
19 charging cases, the purpose to promote -- the
20 purpose is to promote the public good from
21 unnecessary burdens to the public and ensure that
22 the public is protected and utility actions do not
23 incur economic waste.

24 Empire's asking the Commission for
25 pre-approval to spend approximately \$380 million to

1 fund a \$1 billion construction project for these
2 wind farms. Now, there's no utility service --
3 pardon me. There's no utility justification for
4 this service. The proposed construction of wind
5 assets are not actually proposed or needed to meet
6 energy requirements for customers, as I'm showing
7 on this graph.

8 In 2016 Empire's generation resources
9 produced 5,877 gigawatt hours of energy, nearly
10 10 percent above its native customer load at 5,260
11 gigawatt hours. Even accounting for transmission
12 and distribution losses, Empire still made
13 significant net sales into the Southwest Power Pool
14 integrated market.

15 Further, the additional production is
16 not necessary to meet future or anticipated growth.
17 Empire's 2017 integrated resource plan annual
18 update report states that its updated 2017 to 2021
19 load forecasts, quote, demonstrates modest growth
20 with an annual peak in energy growth rates of less
21 than one-quarter of 1 percent over the five-year
22 period. So the growth in the near term, it's not
23 there. That's from the company's own statements.

24 Third, the company does not assert
25 that the construction is needed or the construction

1 of the wind assets are needed to meet the energy
2 requirements of its customers. In fact, in a
3 response to a data request from OPC, Empire admits
4 that it will not be purchasing energy from Wind
5 Holdco or the wind project.

6 Second, the proposed acquisition of
7 600 megawatts of excess wind assets are not
8 proposed to meet -- or meet its capacity
9 requirements. This additional wind production is
10 not necessary to meet Empire's current capacity
11 requirements. Empire presently has 1,712 megawatts
12 of resources for supplying electricity to its
13 customers. Empire's historical all-time peak
14 demand for electricity is 1,199 megawatts, which
15 occurred in 2010. That's what's on the record of
16 this case.

17 Empire has a capacity reserve margin
18 above 30 percent -- pardon me -- 30 percent above
19 the SPP target reserve, and the SPP only requires a
20 12 percent reserve margin. So currently Empire is
21 well in excess of that margin.

22 This additional wind production is
23 not necessary to meet anticipated capacity
24 requirements. The Southwest Power Pool's 2017
25 resource adequacy report shows that Empire's

1 forecast of net peak load for 2017 through 2022
2 forecasts the net peak load from a range of 1,116
3 megawatts to 1,128 megawatts, both figures well
4 below the 1,712 megawatt capacity of the plant.

5 Now, why does this matter? In the
6 Iatan 2 case, the Commission weighed the utility's
7 need for energy and capacity in justifying the
8 construction of a coal plant. Unlike Iatan 2,
9 Empire has not argued an inability to meet either
10 its energy or capacity needs.

11 Further, there's no rule or
12 regulation requiring the construction of additional
13 wind. Missouri has renewable energy resource
14 requirements, and Empire meets these requirements
15 through purchased power agreements for all of its
16 generation. It gets 150 megawatts from the Elk
17 River Wind Farm and 105 megawatts from the Meridian
18 Way Wind Farm, both located in Kansas.

19 These PPAs provide well in excess of
20 the non-solar renewable requirements that Empire
21 must meet to comply with Missouri's law. The
22 construction of the 600 megawatts of wind in excess
23 are not needed to meet with -- not needed to meet
24 federal, state or renewable requirements.

25 So without an energy need, a capacity

1 need or a regulatory need for the project, why
2 spend the money? To speculate on energy sales in
3 the SPP. As articulated by the company, quote, the
4 Wind Project Co. will generate electricity to sell
5 all of its output into the Southwest Power Pool
6 integrated marketplace and receive all the revenues
7 for such sales.

8 Empire's plan is actually a request
9 for the company to become an insulated independent
10 power producer. The plan is designed to enrich
11 shareholders. Whether or not it will result in
12 customer savings is highly speculate and predicated
13 on a static future. Empire's plan is surrounded by
14 uncertainty and risk with only a limited exposure
15 for shareholders.

16 Empire's customers do not require
17 additional supply side generation and should not be
18 forced to take financial risks associated with
19 playing the market.

20 Move on to modeling concerns. As I
21 stated before, the plan before you today and I
22 think really the substance of what you're being
23 asked to do is to provide predetermination based
24 off of the company's modeling which underlies the
25 estimates for the Stipulation & Agreement.

1 Now, what's unique about this
2 proceeding is that all of the figures that you've
3 heard, all the costs and the revenues are
4 completely projected. Unlike a rate case or a FAC
5 proceeding, Staff and other parties -- where Staff
6 and other parties would be able to review actual
7 incurred costs and actual revenues to form its
8 recommendation. That's not the situation here.

9 The only evidence offered to support
10 Empire's contention that ratepayers will benefit
11 from the construction of the 600 megawatts of
12 excess wind assets are Empire's own models. The
13 signatories to the stipulation make it abundantly
14 clear that they are relying solely on Empire's
15 modeling.

16 If you believe that the model may not
17 accurately depict anticipated costs or anticipated
18 revenues associated with this project, then there's
19 no evidentiary basis to support Empire's claim.
20 Upon review of this model, the Office of the Public
21 Counsel found numerous faults through calculating
22 errors, tenuous assumptions and omissions of costs,
23 all of which strike against the credibility of the
24 model.

25 In discussing revenues, the omission

1 of operational costs, each of the four modeling
2 scenarios offered in support of the Stipulation &
3 Agreement omit operational costs that Empire
4 presented to the parties in November of 2017.

5 Here when applying the costs that
6 were provided earlier to the company's P75
7 scenario, ratepayers will be exposed to
8 \$380 million of additional costs. You'll have an
9 opportunity in this proceeding to ask John Riley,
10 who prepared this and provided this in his
11 affidavit, how he arrived at this figure.

12 And, in addition, when you consider
13 that the total impact that we're projecting here
14 when you incorporate costs that the company had
15 previously identified, the customer savings, the
16 \$35 million customer savings or I guess loss
17 sharing program, you can see how quickly that can
18 be exhausted. That will not last three years past
19 the operation of this program.

20 A second issue, the reduced
21 efficiency for siting in Missouri. I believe this
22 was an issue that Commissioner Rupp identified.
23 Historically Missouri has had less productive wind
24 farms than Kansas. The Stipulation & Agreement
25 commits to construction of a portion of the wind

1 assets in Missouri, and this means that the portion
2 of that wind asset would, in fact, be less
3 efficient.

4 Now, the model that the company used
5 in its application were based off of the Elk River
6 wind facility, which is a wind PPA that the company
7 currently maintains. It's my understanding that
8 the modeling -- that that was not used for the
9 modeling for this Stipulation & Agreement.

10 So it's very important that when
11 you're considering whether or not to rely on
12 models, that it actually takes into account
13 circumstances that we know that will be true. So
14 for any proportion of wind farm built in Missouri,
15 it is likely to be less productive than a wind farm
16 built in Kansas.

17 MR. WOODSMALL: Your Honor, can I
18 interrupt just briefly? And I'm sorry, but he's
19 getting into information that was supposed to be
20 confidential. This discussion about Missouri, if
21 he's going to talk about that, we need to go
22 in-camera, and I'd like if there's some way to go
23 back and fix the record so it's not out there as
24 public information.

25 MR. HAMPTON WILLIAMS: Your Honor, I

1 believe --

2 JUDGE BUSHMANN: Did you relate
3 anything that was confidential?

4 MR. HAMPTON WILLIAMS: Your Honor, I
5 believe I did not. The only reference I made was
6 that a proportion would --

7 MR. COOPER: Almost the conversation
8 itself needs to be in-camera for us to have the
9 conversation, I think.

10 MR. HAMPTON WILLIAMS: Well, I will
11 tell you that that was the extent of my statement
12 other than to identify or direct the Commission to
13 where in my witness' testimony this issue would be
14 addressed. So I --

15 JUDGE BUSHMANN: You're done with
16 that subject?

17 MR. HAMPTON WILLIAMS: I am.

18 JUDGE WOODRUFF: Let me know if we
19 need to go in-camera for any other portion.

20 MR. HAMPTON WILLIAMS: Yes, sir.
21 Moving on. The wind asset degradation. This will
22 be testified to by John Robinett.

23 Over time wind turbines become less
24 efficient. Empire's model omits performance
25 degradation of its wind turbines. Empire's model

1 assumes perfect per and perpetual operational
2 efficiency. If the Commission believes that
3 there's a possibility for wind assets to degrade
4 and become less efficient over time, the Commission
5 should not rely on the company's model.

6 The excess wind supply in the SPP
7 market. Dr. Geoff Marke speaks to -- Dr. Geoff
8 Marke will speak to this issue in his affidavit
9 with respect to additional wind projects that are
10 coming online in the Southwest Power Pool.

11 Wind revenues follow supply and
12 demand principles when the resource is available
13 and producing. So, generally speaking, the more
14 wind available on the market, the less revenue the
15 wind resource individually may produce.

16 Empire's modeling assumes at the high
17 end over 6 gigawatts of wind will be built into the
18 SPP over a 20-year time span. Now, the problem is
19 that if you -- that Empire's wind revenue models
20 don't consider or did not model the construction of
21 its own plants. That's 600 megawatts.

22 And if we look into construction that
23 has been presented in front of this Commission, the
24 440 megawatts from the GPE -- or that were
25 identified in the GPE/Westar merger case, as well

1 as the 2 gigawatts of the AEP Wind Catcher case
2 which is going through Oklahoma right now, we're
3 not even through this proceeding and we've already
4 hit half of the completed annual, I should say,
5 anticipated construction that the company has
6 modeled.

7 Empire's models also do not assume
8 additional wind projects on the SPP after 2021, to
9 be constructed after 2021. If the Commission
10 believes it's possible or likely that after 2021
11 wind assets may be built in the SPP, you should not
12 rely on the company's modeling.

13 There's also a risk of negative
14 pricing. John Riley speaks to this. Negative
15 pricing occurs when wind resources are being sold
16 below the actual costs of operating the asset.

17 Now, production tax credits can be
18 used as an offset to make up the difference. In
19 this circumstance, however, the lion's share,
20 99 percent or the lion's share of those tax credits
21 will be not enjoyed by the ratepayers themselves.
22 As a result, there's going to be more exposure to
23 the issue of negative pricing in the modeling
24 itself.

25 One of the other just general

1 concerns when we're talking about wind revenues,
2 wind generation, we've prepared a few charts for
3 you which talks about historically wind -- just the
4 wind generation models for Empire itself, and what
5 we see here and what this chart represents is the
6 output of Empire's wind. We see that it is high in
7 a certain number of months and then is at its
8 lowest in July. This is over a three-year time
9 period.

10 Okay. We also see a pricing model
11 over the same period of time. What this chart
12 indicates is that during those summer months, the
13 same July of 2015, '16 and '17 are those peak
14 prices or when those peak revenues occur. And when
15 you overlay the charts with each other, what we see
16 is that when the wind produces -- the wind is at
17 its least amount of production, the costs are at
18 its highest and vice-versa, when it's at its
19 greatest amount of production, the costs are low.

20 The reason that this is informative
21 is with respect to, again, projecting either
22 constant levels of wind revenues, which is a
23 concern that we have.

24 In addition, and just to go back to I
25 think some general conversations we've had about

1 why it is important to maintain or even operate a
2 diverse wind -- pardon me, diverse energy portfolio
3 or energy assets. What these charts are going to
4 show are four circumstances throughout the year of
5 2016. We'll start with the minimum load day, and
6 what this chart is indicating is the blue lines are
7 the actual energy needs for the company at that
8 day. What the red line indicates are the point in
9 time when the wind assets are actually producing.

10 So what we see is, sometimes when you
11 actually need the capacity itself, the wind's not
12 available, which means that either you're going to
13 have to be generating it yourself or you're going
14 to most likely purchase it from the SPP.

15 Same for the high peak load day for
16 the winter. We also see again a lot of production
17 around midnight hours, not so much in the
18 afternoon. Here again, a lot of production at 3 or
19 4 a.m., not so much the afternoon. And summer
20 2017, we see a lot of demand at the point in time
21 when the production of the wind is at its lowest.

22 An additional concern with the
23 company's modeling as put into its application. As
24 modeled for its initial application, the company
25 assumed a 54 percent wind capacity, which means a

1 very, very productive -- the wind capacity factor
2 is when the wind is actually generating and when it
3 is, in fact, selling into the market. When we
4 compare that model number versus what has in
5 reality occurred from 2014 to 2017, the capacity
6 factor is well in excess of what is occurring in
7 the market itself.

8 So when we normalize or I guess
9 reduce or average the capacity factor modeled for
10 the initial application assumed that those revenues
11 that would be anticipated would be reduced.

12 Here we see the ABB modeling. This
13 is an issue that -- pardon me. This is something
14 that Mr. Cooper cited in his opening as a good
15 justification as to why we'd be looking to do this
16 project. In looking at the ABB models for Elk
17 River, we see a -- we see a forecast which shows a
18 dramatic increase over through 2035.

19 Here what we're looking at is the
20 projection models for Elk River. We see projected
21 average market prices between the 2016 model and
22 the 2017 model. So in just one year we see a
23 dramatic decrease in the efficiency of what
24 actually is coming through.

25 Same with historical day-ahead

1 models, that the actual numbers are showing prices
2 decreasing, though the projections are showing a
3 dramatic increase.

4 Negative price intervals. Negative
5 prices occur when wind resources are being sold
6 below the price itself. Negative prices are an
7 occurrence in the SPP. As we can see over the
8 2016, '15 -- pardon me, 2015, '16 and '17 period,
9 they are increasing. The modeling itself again
10 does not address for this 7 percent increase for
11 negative pricing. When things are going in the
12 negative price model, understand that those
13 revenues are not being produced.

14 This is the Elk River minimum market
15 pricing. So what we see here on this chart are
16 annual projections on the top and then the actual
17 numbers on the bottom. The ABB's projections of
18 what these minimum prices could be or would be were
19 dramatically off from what, in fact, occurred.
20 Same thing is actually true with the maximums, that
21 the -- that the future's actually less optimistic
22 than the projection themselves.

23 Now, contrary to the Sierra Club's
24 reputation about negative pricing, this is not
25 something that OPC is coming up with or making up.

1 The SPP market model report for this year said that
2 SPP's continued growth of wind generation into the
3 market, that there are a number of intervals with
4 negative prices that continue to increase. So this
5 remains a problem.

6 To address this, the SPP actually
7 considered a rulemaking which would require that
8 the assets themselves would be dispatchable by the
9 Southwest Power Pool. Now, this creates two
10 problems, one of which is that the only way to
11 receive the production tax credits is if you're
12 actually in operation.

13 So if the SPP actually asserts the
14 jurisdiction over the ability to dispatch that wind
15 generation, then that means that whoever's -- who's
16 holding or anticipating the benefit of the
17 production tax credit will not be receiving that
18 benefit.

19 There's a U.S. District case that
20 came out earlier this week regarding a wind farm
21 that had a contract with Independence, which was
22 actually seeking contractual compensation for the
23 lack of recovery for PTCs. We do not have a
24 contract to review to determine whether or not the
25 tax equity partner or any affiliate will have any

1 terms like that. It is possible that this proposal
2 could expose those ratepayers or customers to
3 actually compensating the tax equity partners for
4 the loss of PTCs due to curtailments.

5 This is a real issue. The question
6 that was brought before -- pardon me. The
7 rulemaking failed. It got 62 percent of the vote.
8 It needed a two-thirds majority. SPP's going to
9 take up the issue again in the summer. This is a
10 present issue.

11 Now, those were all talking about
12 concerns with revenues that were being modeled. We
13 also have concerns with costs, and I will be
14 expeditious. With respect to net salvage costs,
15 Empire's scenarios omit net salvage costs. John
16 Robinett addresses this issue in his testimony.
17 Please ask him about it.

18 Risk of costs associated with other
19 investments. Empire is short on -- is not short on
20 energy capacity, but this project will require
21 substantial investments on behalf of the company
22 that may prevent it from investing in other demand
23 side technologies, such as AMI meters.

24 There's an opportunity cost
25 associated with this project. Dr. Marke addresses

1 this in his affidavit. I would highly encourage
2 you to ask him questions about that.

3 In addition, there is a concern that
4 I think was addressed or at least brought up by
5 Mr. Woodsmall regarding risks of extra-
6 jurisdictional denial. What happens if Missouri
7 approves it but Kansas denies it? Would the
8 project continue? Would we face increased
9 allocation of the costs related to that project?
10 That is a present concern.

11 The risk of fair market value for
12 buying out the tax equity partner. So in year ten,
13 the -- there's a potential for the company to go
14 ahead and assume the entire wind asset itself from
15 the purchase. Right now the modeling identifies
16 that as a set number. However, the terms identify
17 that as a fair market value. So that's a question
18 mark. It's going to be determined at that point in
19 time.

20 So again, all of these scenarios that
21 I'm discussing are factors that were included in
22 the company's modeling, and if you cannot rely on
23 the company's modeling, then it should not
24 substantiate the predetermination of a proposal.

25 Moving on. I think Ms. Bell

1 discussed the rate case history for Empire. I did
2 want to quickly discuss rate case impacts and
3 basically what a 12 percent rate increase would be
4 on the customers of Empire District Electric.

5 On the right column we see \$17.17 per
6 month increase for summer, for non-summer \$16 per
7 month increase, for the total increase of \$196.67
8 per year.

9 Now, according to -- Ms. Bell already
10 discussed it, that Joplin currently has some of the
11 highest rates of any of the IOUs in this state. So
12 again, this is going to exacerbate that disparity
13 between the company itself.

14 Now, with respect to the original
15 filing, and this was the 800 megawatt and shutting
16 Asbury down, we can see here the difference between
17 the rate base costs, and this jump down here on the
18 bottom left corner is the impact of the
19 construction of the 800 megawatts.

20 As you can see, that not only are the
21 benefits projected well in the future, but there
22 are a number of -- basically we're bringing on a
23 lot of capacity assets about ten years in advance,
24 and there's no reason for -- again, no utility
25 purpose to bring on those assets early.

1 Now, when we compare that to
2 something more akin to what's being proposed in the
3 Stipulation & Agreement, this was a 550 megawatt
4 scenario. The Stipulation & Agreement is 600. So
5 there's a little variability here. But what we see
6 for the same time periods is again a disparity for
7 about ten years as far as when the company actually
8 needs that investment to serve ratepayers. So the
9 rate base will be increasing.

10 The other thing to note about this
11 graph is the bottom left, what's happened since
12 2012 to 2015. Those cases were when we were
13 actually making additional investments into the
14 Asbury plant. We made environment upgrades to
15 extend the life from 2030 to 2035. It was about
16 \$120 million to extend the life of the coal plant.
17 And those costs were reflected in rate cases over
18 the last five years.

19 So the question is who actually
20 benefits? We don't believe the ratepayers do. We
21 believe that there's an increased risk. All of the
22 risk is -- actually, a vast majority of the risk is
23 being placed on ratepayers themselves.

24 You know, an example of what was, you
25 know, sought in the Stipulation & Agreement and

1 identified as ratepayer protection is a \$35 million
2 shareholder exposure cap. So of the first
3 \$70 million in losses, there's a one for one
4 tradeoff between shareholders and ratepayers.
5 After that, that cap stops and shareholders will no
6 longer be held liable.

7 In addition, there is a most favored
8 nation clause which has exemptions. Does not
9 include all things. Now, there's a stipulation
10 that was filed in the AEP Wind Catcher case in
11 Oklahoma. That stipulation identified a net
12 benefit guarantee. It identified a capacity factor
13 guarantee. It identified caps on investment costs,
14 how much the program would actually be billed. It
15 had commitments on off-system sales margins. It
16 had commitments on extra-jurisdictional denial.

17 In short, they got a lot better deal.
18 The protections that were sought in other
19 jurisdictions were much stronger than what's being
20 presented to the Commission today.

21 The Missouri Supreme Court states
22 that the Commission's purpose is to protect
23 customers against the natural monopoly, the public
24 utility. The thought and purpose of this policy is
25 the protection of the public, and the protection

1 given to the utility is merely incidental.

2 So when we're looking at the terms of
3 the stipulation, ask yourself, is that stipulation,
4 is the cap proposed, is that designed to protect
5 shareholders or designed to protect ratepayers?
6 Because if the answer is shareholders, then the
7 Commission should deny the stipulation.

8 The -- I want to move on to the
9 federal corporate tax rate reduction issue.
10 Included in the Stipulation & Agreement is an
11 attempt to conceal true costs of the wind proposal
12 by proposing to implement tariffs to reduce utility
13 rates associated with the reduction of the federal
14 tax rate.

15 This is a red herring. It's an
16 association fallacy because the outcome of either
17 case is not predicated on the other. The
18 Commission's already established a docket to
19 consider the use of AAOs, which is scheduled later
20 this month. The Legislature is considering
21 legislation that would authorize the Commission to
22 reduce electric rates based off of reduction of
23 taxes.

24 Public Counsel opposes the use of tax
25 cuts as an offset to this unnecessary spending

1 project because within the near future the cost to
2 ratepayers and the risks that they're going to be
3 exposed to will exceed or outweigh the short-lived
4 benefit from the tax reduction that will be passed
5 through.

6 If the Commission dismisses or denies
7 this application, you will still have an
8 opportunity to address the tax issue itself in
9 other proceedings.

10 Judge, may I go in-camera?

11 JUDGE BUSHMANN: You want to go
12 in-camera?

13 MR. HAMPTON WILLIAMS: Yes, sir.

14 (REPORTER'S NOTE: At this point, an
15 in-camera session was held, which is contained in
16 Volume 4, pages 169 through 170 of the
17 transcript.)

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1 JUDGE BUSHMANN: All right. We're
2 back in public session.

3 MR. HAMPTON WILLIAMS: With respect
4 to the continued operation of the Asbury facility,
5 its efficiencies or its cost effectiveness moving
6 forward, both John Robinett and Lena Mantle
7 provided testimony in this respect to the initial
8 application that the Commission may find
9 informative.

10 With that, I will stand open for
11 questions.

12 CHAIRMAN HALL: No questions. Thank
13 you.

14 COMMISSIONER KENNEY: No questions.
15 Thank you.

16 COMMISSIONER RUPP: I have a
17 question. All right. So looking here, the
18 upgrades that were done made it more efficient from
19 a fuel to electricity ratio. How often is it
20 being -- we heard testimony it's not being
21 dispatched very much from SPP. So if you have an
22 efficient unit that's not being used, is it still
23 efficient?

24 MR. HAMPTON WILLIAMS: So the
25 testimony for both Lena Mantle I believe addresses

1 the dispatch rate for the plant.

2 COMMISSIONER RUPP: All right. I'll
3 wait for that.

4 MR. HAMPTON WILLIAMS: Please ask her
5 that question. My recollection is, with respect to
6 any of the coal facilities that Empire operates,
7 that the Asbury plant has the most dispatch. So I
8 would contest that characterization.

9 COMMISSIONER RUPP: Great.

10 JUDGE BUSHMANN: Thank you.

11 MR. HAMPTON WILLIAMS: Thank you.

12 JUDGE BUSHMANN: We're ready for
13 Empire to call their first witness.

14 MR. COOPER: Thank you, your Honor.
15 We would call James McMahan.

16 (Witness sworn.)

17 JUDGE BUSHMANN: You may be seated.

18 JAMES McMAHON testified as follows:

19 DIRECT EXAMINATION BY MR. COOPER:

20 **Q. Please state your name.**

21 A. James McMahan.

22 **Q. By whom are you employed and in what**
23 **capacity?**

24 A. I'm employed by Charles River
25 Associates. I am a vice president in the energy

1 practice.

2 Q. Have you caused to be prepared for
3 this proceeding certain direct and surrebuttal
4 testimony in question and answer form?

5 A. I have.

6 Q. Did you also prepare an Affidavit in
7 Support of Nonunanimous Stipulation & Agreement for
8 purposes of this proceeding?

9 A. I did.

10 Q. Is it your understanding that those
11 documents -- well, let me back up. Yeah. Is it
12 your understanding that the direct testimony
13 confidential and public has been identified as 6C
14 and 6P for identification?

15 A. Yes.

16 Q. And is it your understanding that the
17 surrebuttal testimony's been marked as Exhibit 7C
18 and 7P for identification?

19 A. Yes.

20 Q. And that the affidavit has been
21 marked as Exhibit 8C and 8P for identification?

22 A. Yes.

23 Q. Do you have any changes that you
24 would like to make to that testimony or the
25 affidavit at this time?

1 A. Just one to my direct testimony.

2 Q. **Where is that?**

3 A. So lines 9 to 11.

4 Q. **Well, let's back up. Page number,**
5 **how about?**

6 A. Sorry. I'm reading from a data
7 response without the page number. Hang on. Let me
8 pull up the page number here. I don't have the
9 specific page number.

10 Q. **Okay. We'll table that for the time**
11 **being.**

12 A. That's the only correction I have.

13 Q. **What was the correction going to be?**
14 **Why don't you describe that?**

15 A. Yes. It's the RAP portfolio of
16 demand side management measures. So the correction
17 should read that the reasonable achievable
18 portfolio of demand side measures adopted in
19 Case No. ER-2016-0023 utilized in Case No.
20 EO-2016-0223 was included in all the portfolios.
21 So it was a correction to indicate that the RAP DSM
22 portfolio was used in all of the GSFA modeling.

23 Q. **Thank you. Are the answers as now**
24 **amended, I guess, in your testimony and your**
25 **statements in the affidavit true and correct to the**

1 **best of your information, knowledge and belief?**

2 A. Yes.

3 MR. COOPER: Your Honor, I would
4 offer Exhibits 6C and P, 7C and P, and 8C and P at
5 this time.

6 JUDGE BUSHMANN: Any objections?

7 MR. NATHAN WILLIAMS: Yes, Judge. I
8 object to the modification, but I'd like to voir
9 dire him.

10 JUDGE BUSHMANN: For what purpose?

11 MR. NATHAN WILLIAMS: Disclosure.

12 JUDGE BUSHMANN: Disclosure? Can you
13 be more specific?

14 MR. NATHAN WILLIAMS: This is a big
15 change that he's just made to his testimony about
16 what demand side management was included in the
17 generation fleet savings analysis. I'm trying to
18 find out when it was disclosed to -- I want to
19 inquire as to when it was disclosed to the parties.
20 I heard him refer --

21 JUDGE BUSHMANN: Very briefly you can
22 ask a few questions.

23 VOIR DIRE EXAMINATION BY MR. NATHAN WILLIAMS:

24 Q. **Mr. McMahon, you just made I think a**
25 **significant change to your direct testimony**

1 **regarding the RAP DSM portfolio, correct?**

2 A. We made a change to the -- to the --
3 one of the data requests corrected my testimony.

4 **Q. What data request response was that**
5 **that correction showed?**

6 A. I have to find that. I can pull it
7 from my data request.

8 **Q. When was that --**

9 MR. COOPER: I'm sorry. Mr. McMahon,
10 if you were able to go to your binder, would you be
11 able to locate that?

12 THE WITNESS: Yes.

13 JUDGE BUSHMANN: Can someone bring
14 his binder up, please? We might be able to clear
15 this up.

16 THE WITNESS: So it's to Staff 215,
17 and it's on page 24, lines 9 through 11.

18 BY MR. NATHAN WILLIAMS:

19 **Q. And when was that data request**
20 **response?**

21 A. January 2nd, 2018.

22 **Q. And was that -- was that information**
23 **provided to the other parties aside from Staff?**

24 A. I believe all parties had access to
25 all the data requests.

1 Q. But this is more than just -- you're
2 making a change to your testimony based on this
3 information. Did you disclose that change to the
4 parties affirmatively? Clearly you did to Staff.

5 A. It was disclosed in this data
6 request.

7 Q. But beyond that, you're not aware of
8 any disclosure before here today?

9 A. No.

10 MR. NATHAN WILLIAMS: May I have a
11 moment?

12 JUDGE BUSHMANN: Yes. Any objection
13 now to the admission of those exhibits?

14 MR. NATHAN WILLIAMS: I've been
15 informed by tech-- or Public Counsel technical
16 personnel that Public Counsel was aware at some
17 earlier point in time. So I will not make an
18 objection, or withdraw it.

19 JUDGE BUSHMANN: In that case, I will
20 admit Exhibit 6C and P, 7C and P and 8C and P into
21 the record of hearing.

22 (EMPIRE EXHIBITS 6C, 6P, 7C, 7P, 8C
23 AND 8P WERE RECEIVED INTO EVIDENCE.)

24 MR. COOPER: Your Honor, we would
25 tender Mr. McMahon for cross-examination.

1 JUDGE BUSHMANN: First cross would be
2 by Staff.

3 MS. FORCK: Thank you, your Honor.

4 CROSS-EXAMINATION BY MS. FORCK:

5 Q. Good afternoon, Mr. McMahon.

6 A. Good afternoon.

7 Q. Are you familiar with OPC witness
8 Lena Mantle's affidavit in opposition to the
9 stipulation?

10 A. I am.

11 Q. Do you have a copy of it in front of
12 you?

13 A. I do not.

14 MS. FORCK: May I approach, your
15 Honor?

16 JUDGE BUSHMANN: You may.

17 BY MS. FORCK:

18 Q. Would you please refer to
19 paragraph 20.

20 A. Yep.

21 Q. I'll give you a moment to read that.

22 A. Okay.

23 Q. Did the model used in determining the
24 market protection mechanism in the stipulation
25 include revenue from the SPP for wind energy sales?

1 A. Yes.

2 Q. **And should it have?**

3 A. Yes. I think there is an assumption
4 that all wind will be sold into SPP and generate
5 revenue if the price is not zero.

6 Q. **Okay. Do you agree with Ms. Mantle's**
7 **characterization of the impacts of not including**
8 **revenue from the SPP for wind energy sales?**

9 A. I agree that if you don't have any
10 revenue from the wind and selling it into SPP, that
11 then you only have cost, and that's an increase on
12 rates. I don't know if I necessarily agree with
13 her percentage increase, but I do agree that
14 there's a cost without associated revenue. But I
15 categorically disagree that there will be no
16 revenue associated with SPP wind sales.

17 Q. **Okay. Would the market protection**
18 **mechanism help mitigate those impacts that she**
19 **refers to?**

20 A. Well, the market protection mechanism
21 will mitigate the impact if the revenue is less
22 than projected because the -- the stipulation, all
23 of the analysis that we performed on behalf of
24 Empire in this case gets to a net present value
25 revenue requirement that is positive over the 20

1 and 30 year -- 20 and 30 years.

2 So in the case where in a downside,
3 extreme downside case that effectively was not
4 modeled, yes, the market protection mechanism would
5 provide some mitigation or protection. Did that
6 answer your question?

7 Q. I believe it did. Those are all the
8 questions I had on Ms. Mantle's affidavit.

9 Are you familiar with OPC witness
10 John Robinett's affidavit in opposition to the
11 stipulation?

12 A. Yes, I've read his opposition.

13 Q. Do you have a copy of that in front
14 of you?

15 A. No.

16 MS. FORCK: May I approach?

17 JUDGE BUSHMANN: You don't need to
18 ask me.

19 BY MS. FORCK:

20 Q. Please refer to paragraph 8.

21 A. Yes.

22 Q. Mr. Robinett discusses a 30-year plan
23 related to the stipulation. Did the modeling
24 associated with the stipulation project out as far
25 as 30 years?

1 A. Yes. Oh, with the stipulation was
2 primarily 20 years.

3 Q. And why -- why was it 20 years
4 instead of 30?

5 A. I think that's a better question for
6 David Holmes specifically. The modeling that we
7 performed with the GFSA was 30 years.

8 Q. Okay. Please refer to paragraph 9 of
9 Mr. Robinett's affidavit.

10 A. Uh-huh.

11 Q. He points to your affidavit filed in
12 support of the stipulation --

13 A. Uh-huh.

14 Q. -- in which you indicated Energy
15 Center Units 1 and 2 and Riverton Units 10 and 11
16 would no longer be retired in the 20-year plan; is
17 that correct?

18 A. Yes, I see that.

19 Q. What retirements are being
20 contemplated by Mr. Robinett when he says, not
21 shown are the retirements that occur during the
22 period of the table?

23 MR. NATHAN WILLIAMS: I'm going to
24 object to Mr. McMahon speculating on what
25 Mr. Robinett is intending.

1 JUDGE BUSHMANN: Response?

2 MS. FORCK: Your Honor, Mr. Robinett
3 was discussing Mr. McMahon's testimony, and at
4 table -- or his affidavit, I should say, and a
5 table that's included in that affidavit that
6 outlines retirements and expected additions. And
7 so I guess I'm not asking -- I'll rephrase the
8 question to more accurately ask Mr. McMahon whether
9 he had understands what's being asked her.

10 JUDGE BUSHMANN: All right. Go
11 ahead.

12 BY MS. FORCK:

13 Q. So are there any retirements that are
14 not shown on your table?

15 A. In Figure 3 in my stipulation, there
16 is -- it's showing the 20-year build schedule for
17 the stipulation versus the customer savings plan.
18 So it's the build schedule, and so they -- the
19 witness Robinett pointed out that it did not show
20 retirements, which the title says build schedule.

21 So there are retirements in here, and
22 probably a more accurate representation of the
23 build and retirement schedule I would have
24 illustrated that Energy Center 1 and 2 are retiring
25 in 2023 and 2026, and Elk River and Meridian Way

1 contracts are expiring and there's a retirement of
2 Asbury as well that's not shown. But again, it's a
3 build schedule for Figure 3. Does that answer your
4 question?

5 Q. I think it does because I think that
6 actually preempted my follow-up, which was going to
7 be why are those retirements not included. So
8 because it's a build schedule, is that an accurate
9 characterization?

10 A. Correct.

11 Q. Please refer to Figure 3 of your
12 affidavit. This projection shows a comparison of
13 the stipulation to both the CSP and the 2016 IRP
14 and preferred plan; is that correct?

15 A. Yes.

16 Q. You stated that the CSP builds two
17 combined cycles units and solar, while the
18 stimulation plan would call for only a combustion
19 turbine unit to replace Asbury; is that right?

20 A. Right, in the 2035 time frame.

21 Q. Why would the CSP need two combined
22 cycle units and solar?

23 A. Where are you referring to the solar?
24 Oh, sorry. I see the solar. I would have to go
25 back specifically to the modeling, but this is an

1 optimization model that's determining to me the
2 capacity requirement. At a given -- at any given
3 time it requires a set of builds.

4 Q. Do any of these additions indicated
5 in the 20-year projection offset the retirements
6 that are -- that we just discussed that are
7 expected to occur between years 20 and 30? I'm
8 sorry. I don't think we discussed those. That was
9 a set of questions I didn't ask you.

10 Mr. Robinett also discussed expected
11 retirements between years 20 and 30; is that
12 correct?

13 A. Right. This goes back to my comments
14 about Energy Center 1 and Energy Center 2.

15 Q. So do any of these additions
16 indicated in this 20-year projection offset those
17 retirements?

18 A. Yes. That's what the question was
19 getting at to prior. Yes, they're replacing
20 capacity that's required to meet reserve margins
21 out in the future.

22 Q. Okay. Thank you. Okay. Are you
23 familiar with OPC witness John Riley's affidavit in
24 opposition of the stipulation?

25 A. Yes.

1 Q. And I'm assuming you don't have a
2 copy of that in front of you?

3 A. No.

4 Q. Okay. Please refer to paragraph 12.

5 A. Okay.

6 Q. Okay. Mr. Riley states, yet my
7 analysis is that this wind project will lose money
8 every year. In fact, my projections show the Wind
9 Project Cos. will lose nearly 61 million in the
10 first 1.25 years. Have you reviewed Mr. Riley's
11 analysis?

12 A. I have generally.

13 Q. Would you agree that based on his
14 projections, the Wind Project Cos. will lose money
15 every year?

16 A. I think his analysis does show that.

17 Q. Do you agree with the analysis that
18 he performed?

19 A. No. And I know witness Holmes will
20 talk more about this, but specifically I take issue
21 with the assumptions that he used in terms of the
22 market price projections and the wind production
23 estimates, as well as some differences in operating
24 costs.

25 Q. Okay. Can you -- and if this is more

1 appropriate for Mr. Holmes, I'll ask this of him.
2 But can you explain how Mr. Riley reached his
3 conclusion as compared to how Empire modeled the
4 costs and revenues?

5 A. I think that's a better question for
6 Mr. Holmes.

7 Q. Thank you. Are you familiar with OPC
8 witness Geoff Marke's affidavit in opposition to
9 the stipulation?

10 A. Yes.

11 Q. Please turn to page 4. On page 4,
12 Dr. Marke provides a commentary as to why Figure 3
13 from your affidavit is misleading. I'll give you a
14 minute to take a look at that, and then I'm going
15 to ask you if you agree with that commentary.

16 A. Yes, I reviewed it. It's the same
17 graphic presented in the prior testimony I
18 reviewed.

19 Q. Do you agree with his commentary that
20 this figure is misleading?

21 A. No. Again, it's -- as indicated in
22 the title, it's a build schedule stipulation and
23 did not include all of the retirements.

24 Q. Okay. Dr. Marke indicates that every
25 scenario will include additional solar in the

1 future. Would the solar additions he refers to all
2 be included within the next 20 years?

3 A. I don't believe that's true, that
4 every -- every plan includes solar in the next 20
5 years.

6 Q. Please turn to page 7. On 7
7 Dr. Marke discusses potential market rule changes
8 that would require nondispatchable energy such as
9 wind to register as dispatchable variable energy
10 resources, which would allow SPP to curtail their
11 output.

12 Does the customer protection
13 mechanism described in the stipulation mitigate
14 this concern?

15 A. It mitigates the concern by putting a
16 limit on the amount of costs the customers could
17 incur.

18 Q. And the customer protection mechanism
19 is designed to address uncertainty in the market;
20 isn't that right?

21 A. Correct.

22 Q. So this type of uncertainty could be
23 covered by this mechanism?

24 A. Well, I mean, let me explain this a
25 little bit more. So the -- there is a question

1 about dispatchability of wind and potential
2 curtailment of wind and basis differentials of
3 wind, and I'm sure I'll get into that more so in
4 my -- in other cross.

5 But the larger point here is that
6 this was addressed in all of the modeling, the
7 long-term modeling that we performed to look at the
8 expected value of the wind under a base case, but
9 also look at lower market conditions in situations
10 where you had highest basis risk, all right, so
11 differentials between different nodes.

12 So it was addressed in the risk
13 modeling in the analysis, and it's also addressed
14 in the market protection mechanism in terms of
15 limiting customer risk.

16 MS. FORCK: Okay. Thank you. I have
17 nothing further.

18 JUDGE BUSHMANN: It's almost a
19 quarter to two. I think we're going to need to
20 take a break here and then come back for the next
21 cross. So we'll be in recess until approximately
22 2:30, unless the USB meeting runs late, then we
23 might be a few minutes after that.

24 (A BREAK WAS TAKEN.)

25 JUDGE BUSHMANN: Let's go back on the

1 record. When we left off, we were in the middle of
2 cross-examination, and the next cross would be by
3 MECG.

4 MR. WOODSMALL: Thank you, your
5 Honor.

6 CROSS-EXAMINATION BY MR. WOODSMALL:

7 Q. Good afternoon, sir. I'm going to
8 ask you some questions about rate increases and
9 Empire's current capacity. Are you comfortable
10 talking about those issues?

11 A. Certainly Empire's current capacity.
12 I think questions on rate increases specifically
13 should be deferred to Mr. Holmes.

14 Q. Okay. That saves us some time. I'll
15 move right on to current capacity. Were you here
16 when OPC made their opening statement?

17 A. Yes, I was.

18 Q. And do you recognize the charts that
19 I handed you, which is slides No. 5 and 6 from
20 OPC's opening statement?

21 A. They're not numbered, but I -- if the
22 first slide is Empire's energy requirements 2016
23 and then peak demand for the second slide, yes.

24 Q. Well, slide 6, the title is Empire's
25 capacity requirements; is that correct?

1 A. Okay. If that's slide No. 6, that's
2 Empire's capacity requirements, yes.

3 **Q. Can you tell me for purposes of the**
4 **energy and capacity comparisons, what is that**
5 **comparing?**

6 MR. NATHAN WILLIAMS: Judge, could we
7 have this marked as an exhibit if we're going to
8 use it, even if it's demonstrative?

9 MR. WOODSMALL: As long as it's
10 demonstrative, I don't have a problem. It's
11 certainly not evidence.

12 MR. COOPER: We would object to it
13 being marked as evidence as well.

14 MR. NATHAN WILLIAMS: I'm asking that
15 it be marked for identification.

16 JUDGE BUSHMANN: I think he's just
17 wanting to make sure the record's clear; is that
18 correct?

19 MR. WOODSMALL: And I have no problem
20 with that. Nathan, are you going to mark it as one
21 of yours?

22 JUDGE BUSHMANN: If you're going to
23 use it, do you want to have it marked as an MECC
24 exhibit?

25 MR. WOODSMALL: That's fine. So MECC

1 352. For purposes of clarity, I will mark the one
2 page, which is a back and front, Empire's energy
3 requirements, Empire's capacity requirements, as
4 MECG 352, and that's what I'll provide to the court
5 reporter. So I'm not marking the entire bundle, if
6 that's your Honor's preference.

7 JUDGE BUSHMANN: That will be my
8 preference.

9 MR. WOODSMALL: And I will get that
10 to the court reporter.

11 BY MR. WOODSMALL:

12 Q. Do you have what has been marked as
13 MECG 352, sir?

14 A. Yes, labeled Empire's capacity
15 requirements.

16 Q. Yes. Can you tell me what the
17 comparison is there for energy and capacity?

18 A. Well, it's the comparison of peak
19 demand to total peak capacity for the Empire
20 system.

21 Q. Okay. And for the energy side it is
22 the 2016 native load energy requirements to the
23 energy generated by the Empire facilities; is that
24 correct?

25 A. Could you re-- could you ask the

1 question again, please?

2 Q. For the slide that is the energy
3 requirements, that's comparing Empire's native load
4 energy requirements to the energy generated by
5 Empire's units; is that correct?

6 A. That is correct.

7 Q. And when I look at -- when we talk
8 about the Empire generating facilities, not only
9 the energy and the capacity, that is based upon
10 their current facilities; is that correct?

11 A. Yes.

12 Q. And it would -- it would include
13 Meridian Way; is that correct?

14 A. Correct.

15 Q. And it includes Elk River; is that
16 correct?

17 A. Yes.

18 Q. And it includes Energy Center; is
19 that correct?

20 A. Yes.

21 Q. And all of those are scheduled to be
22 retired or expire sometime in the near future; is
23 that correct?

24 A. Yes, in the 2020s.

25 Q. Okay. Thank you.

1 MR. WOODSMALL: I have no further
2 questions, your Honor.

3 JUDGE BUSHMANN: Cross by Division of
4 energy?

5 MR. POSTON: No questions.

6 JUDGE BUSHMANN: Renew Missouri.

7 MR. LINHARES: No questions. Thank
8 you, Judge.

9 JUDGE BUSHMANN: Sierra Club?

10 MR. ROBERTSON: Yes, your Honor.

11 CROSS-EXAMINATION BY MR. ROBERTSON:

12 **Q. Mr. McMahon, I want to refer you to**
13 **your affidavit, Exhibit 8, page 7, paragraph 9 and**
14 **Figure 5. There you give the difference in**
15 **customer savings between the original customer**
16 **savings plan and the stipulation; is that correct?**

17 A. That's correct.

18 **Q. Now, are you aware that as a result**
19 **of their RFP responses, Empire revised the wind**
20 **savings from the GFSA?**

21 A. Yes, which is reflected in these
22 plans.

23 **Q. All right. So your Figure 5 shows**
24 **for the SNA a wind energy savings that would be**
25 **greater on a per megawatt basis; is that correct?**

1 A. That the customer savings plan under
2 the GFSA had higher savings than the settlement
3 plan due to the fact that the GFSA customer savings
4 plan had 800 megawatts of wind and was retiring
5 Asbury. The settlement plan has 600 megawatts of
6 winds and is retaining Asbury.

7 And in my affidavit I talk
8 specifically to what drives that differential, what
9 portion is Asbury, which gets back to a question I
10 think asked by Commissioner Rupp, and what portion
11 is driven by the 200 megawatt difference on the
12 wind.

13 **Q. Okay. But for in Figure 5 for the**
14 **original customer savings plan, did you modify the**
15 **wind energy savings or were those as in the**
16 **original?**

17 A. No. As described, this is using
18 common assumptions on the fall 2017 reference case
19 and the updated wind numbers --

20 **Q. In both --**

21 A. -- in the RFP.

22 **Q. In both the stipulation and the**
23 **customer savings plan you're using the same wind**
24 **energy figures?**

25 A. Well, not the same wind energy. It's

1 800 megawatts versus 600 megawatts.

2 **Q. Exactly.**

3 A. But there's also a difference in the
4 projects that are incorporated into those -- into
5 that 800 megawatt bundle and the 600 megawatt
6 bundle based on the bids received.

7 **Q. Figure 5 shows a difference in**
8 **savings over 30 years of \$139 million, with the**
9 **savings being greater for the original customer**
10 **savings plan; is that right?**

11 A. Yes, sir.

12 **Q. And of that 139 million in reduced**
13 **savings, 101 million is attributable to Asbury**
14 **continuing to run, and the other 38 million is due**
15 **to there being less wind added to the portfolio; is**
16 **that correct?**

17 A. That's correct.

18 **Q. What costs of operating Asbury did**
19 **you include in your calculation?**

20 A. The ongoing costs of operating Asbury
21 from a fixed operating cost expense. There's
22 variable operating costs and there's fuel costs.
23 Then, of course, there's the capital costs and the
24 carrying cost of that capital.

25 **Q. And the rate base balance?**

1 A. I don't have the rate base balance
2 available?

3 **Q. Taxes?**

4 A. Yeah. Getting back to the carrying
5 cost, it's a full revenue requirement of the Asbury
6 plant.

7 **Q. And did you include in your**
8 **calculation the pending capital costs of bringing**
9 **Asbury into compliance with the coal combustion**
10 **residual rule and the effluent limitation**
11 **guidelines?**

12 A. Yes, that's included.

13 MR. ROBERTSON: All right. Thank
14 you. That's all.

15 JUDGE BUSHMANN: Cross by Joplin?

16 MS. BELL: Yes. Thank you.

17 Permission to approach?

18 CROSS-EXAMINATION BY MS. BELL:

19 **Q. So I believe you've already answered**
20 **this, but you were present for the opening by OPC,**
21 **correct?**

22 A. I was.

23 **Q. If you'd turn to slide 10. Would you**
24 **agree that there's performance degradation over**
25 **time for wind projects?**

1 A. Would I agree that there's
2 performance degradation over time for wind
3 projects, that's the question?

4 **Q. Correct.**

5 A. Yes.

6 **Q. Okay. Was this accounted for in your**
7 **model?**

8 A. Yes, it was. We modified the
9 capacity factor. So it's a levelized capacity
10 factor of the wind to account for the degradation.
11 So technically you would have a higher capacity
12 factor in the early years if you modeled
13 degradation and it would become a lower capacity
14 factor over time, but what was used in the wind
15 modeling was a levelized capacity factor. So I
16 agree with this chart, and it was incorporated into
17 the analysis.

18 **Q. Can you flip to page 20?**

19 A. Capacity factors, models and for the
20 RFP.

21 **Q. And so does your model still predict**
22 **capacity factors at 54 percent?**

23 A. Just to give a little bit of
24 history -- the answer is no. To give a little
25 history, the initial analysis did not have the

1 benefit of the RFP data, and the initial analysis
2 was based on some initial projections, which I
3 think Mr. Mertens could talk to more specifically.

4 Once the RFP, initial RFP results
5 were back and a short list was being developed,
6 much more specific estimates of actual performance
7 based on actual projects, potential projects, could
8 be incorporated into the analysis. So the analysis
9 was updated.

10 **Q. And what year was that? When was**
11 **that analysis conducted?**

12 A. Well, the initial analysis on the
13 GFSA, which was filed at the end of October of
14 2017, incorporated the estimates, which was the
15 model number here of 54 percent, with the
16 expectation that the numbers would be updated based
17 on data that was received through the RFP process.
18 That was then done in 2018 when updated analysis
19 was provided.

20 **Q. And so the updated number is**
21 **47 percent; is that correct?**

22 A. The updated capacity factor estimate
23 is now 47 percent capacity factor with other
24 differences that drive a very significant reduction
25 overall to just LCOE, which I'm sure I will talk

1 about plenty later. This is one element of what it
2 was updated between the initial modeling and the
3 RFP, but you also have capacity costs, you have the
4 location of the assets, and you have basis
5 differential.

6 Q. So you would agree the initial model
7 was 54 percent, correct?

8 A. Yes.

9 Q. Okay. And you had -- at the time you
10 did the initial modeling, it was after 2014, 2015
11 and 2016, correct?

12 A. I'm sorry. Can I clarify one thing
13 on your prior question? The initial modeling was
14 actually done with two different numbers. There
15 was a low LCOE number which was in a high wind
16 region that was estimated around the 54 percent.
17 There was also a mid LCOE region that had a lower
18 percentage number. In any event, they were updated
19 for -- once the RFP results, just for
20 clarification.

21 Could you ask your question again?

22 Q. The analysis -- at the time you did
23 the analysis, you had the numbers for 2014, 2015
24 and 2016 that are reflected in this chart, correct?

25 A. Can you give me the source of this

1 chart?

2 **Q. I cannot.**

3 A. Okay. Well, this looks like capacity
4 factors of plants between 2014 and 2016 with some
5 estimate for 2017 of existing wind units. I don't
6 know the characteristics of all these wind units,
7 what wind height, what turbines they use, where
8 they're specifically located. All of those things
9 would contribute to the capacity factor estimates
10 at the time.

11 **Q. Are any of the actual numbers in**
12 **2014, 2015 or 2016 over 50 percent?**

13 A. No.

14 **Q. Okay. And these are capacity factors**
15 **for Kansas wind farms; is that correct?**

16 A. That's what the title says of the
17 chart.

18 **Q. And is it a fair characterization**
19 **that capacity for actual wind farms in Missouri is**
20 **lower than in Kansas?**

21 A. I think, generally speaking, if you
22 look at wind charts, wind production charts, that
23 capacity factors in Missouri are generally lower
24 than in Kansas. That's not controverted.

25 **Q. Thank you. If you flip to page 22,**

1 and I guess 23 as well. Those are the ABB
2 forecasts, and those were included in your model;
3 is that correct?

4 A. Subject to check, this says ABB fall
5 27 forecast wind. I'm not sure what that means.
6 It says Elk River annual market prices. I actually
7 don't know how to interpret this chart. Can you
8 describe it for me?

9 Q. I believe it is price per megawatt
10 hour over by year for Elk River.

11 A. But for the Elk River node. And when
12 it says fall 2017 forecast wind, I don't know if
13 there's a fall 2017 forecast for wind. So I'm
14 just --

15 Q. The answer is you don't know?

16 A. I guess I'd like some clarity to
17 answer the question.

18 Q. Okay. I will ask a new question.
19 Would you agree that the benefits to customers
20 depend on the revenues received from SPP for the
21 wind projects?

22 A. Empire operates within SPP today, and
23 has been for the last few years, where all energy
24 generated is sold into SPP and bought back by load.
25 So all generation of energy that's produced by

1 Empire is dependant on revenue from SPP. So yes,
2 the answer is that any wind or any other additions
3 in any of the existing generation depends on
4 revenues from SPP.

5 Q. So yes?

6 A. Correct.

7 Q. Would you agree that the revenues are
8 largely dependent on market prices for wind energy
9 and wind energy generated?

10 A. I guess I want to -- so the way I
11 would answer that question is, again, every asset
12 that sells, every generator that sells into SPP is
13 dependent on the market price at SPP at the hour
14 that it's selling, and that would also apply to
15 wind. I don't know if that's the question you were
16 exactly asking.

17 Q. The revenues in your model, one of
18 the variables in calculating that is market price,
19 correct?

20 A. Correct.

21 Q. And did you examine -- or are you
22 familiar with the market prices used in Empire's
23 analysis?

24 A. Am I familiar with the market prices
25 used in Empire's analysis? Yes, I am.

1 **Q. Okay. And my understanding is that**
2 **there were two market price forecasts that were**
3 **used; is that correct?**

4 A. It's a matter of timing of when
5 different market price forecasts were used. So the
6 original GFSA analysis used what was current at the
7 time that that analysis was produced. We then
8 updated those numbers certainly as part of the
9 stipulation based on the most current ABB price
10 forecasts.

11 And just to be clear, ABB provides
12 all the price forecasts and modeling that goes
13 behind the scenes in terms of price formation for
14 Empire and has been doing that for quite some time
15 through the IRP process.

16 **Q. So the 2017 ABB forecast was lower**
17 **than the 2016 forecast; is that correct?**

18 A. Generally speaking, yes, prices have
19 reduced in the most recent ABB 2017 forecast.

20 **Q. So if you're looking at page 23 of**
21 **OPC's opening, which I believe we labeled MEGC 352,**
22 **the points on this chart, you have no dispute with**
23 **those numbers, correct?**

24 A. So if I interpret this chart to
25 reflect the ABB fall 2016 to 2017 market prices,

1 and it says here Elk River average annual market
2 prices, ABB does not produce an Elk River specific
3 node market price. ABB produces a sub-regional
4 market price that then we adjust for basis
5 differentials between zones.

6 So this is a -- I believe, and I
7 haven't been shown this chart before, but I believe
8 this is a difference between those two pricing
9 points or two price curves, ABB 2016 and the ABB
10 2017.

11 Q. Okay. And if you flip to the next
12 page, page 24. We have actual prices now for 2017,
13 correct?

14 A. Yes.

15 Q. And how does -- how do those actual
16 numbers compare with the forecasts?

17 A. I'm not sure how to read this graph.
18 This says historical revenues have decreased.
19 Model assumes revenues will increase. So you're
20 showing me a price forecast and asking me to
21 comment on the price forecast with these dots?

22 Q. Well, I believe you testified that
23 you're familiar with ABB forecasts, and I hope that
24 you're familiar with the actual prices in 2017. So
25 without regard to the chart, my question is simply

1 **how do the actual numbers compare with what was**
2 **forecasted?**

3 A. I haven't seen this before, so I
4 can't comment specifically. But what's shown here
5 is that the ABB -- or that the actuals through 2017
6 look slightly lower than a forecasted number, but I
7 have not validated this.

8 Q. **If we turn to your affidavit. Okay.**
9 **First, you would agree that there hasn't been an**
10 **identification of a contractor; is that correct?**

11 A. That's not for me probably. I think
12 it's probably Mr. Mertens or Mr. Wilson.

13 Q. **Okay. And no identification of a tax**
14 **equity partner?**

15 A. That would be for Mr. Mooney.

16 Q. **All right. Back to your affidavit.**
17 **I'm looking at Figure 4 where we're talking about**
18 **customer savings. Was the approximate capital**
19 **contribution by Empire included in your calculation**
20 **for customer savings?**

21 A. The capital contribution for Empire
22 relative to the wind we're talking about?

23 Q. **Correct.**

24 A. Yes.

25 MS. BELL: Okay. I would like to go

1 in-camera, Judge, please.

2 (REPORTER'S NOTE: At this point, an
3 in-camera session was held, which is contained in
4 Volume 4, pages 207 through 210 of the transcript.)

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1 JUDGE BUSHMANN: We're now back in
2 open session. Had you completed your
3 cross-examination?

4 MS. BELL: Yes. Thank you.

5 JUDGE BUSHMANN: OPC?

6 MR. NATHAN WILLIAMS: Thank you.

7 CROSS-EXAMINATION BY MR. NATHAN WILLIAMS:

8 Q. Since we're on the topic, will you
9 turn to page 4 of your stip-- or your affidavit in
10 support of the stipulation?

11 A. Uh-huh.

12 Q. And then at the end of paragraph 3,
13 and I don't see it marked as confidential, so I
14 assume it's not, you have a sentence that says, tax
15 equity is expected to contribute 529 million,
16 leaving 429 million to be reimbursed through rates
17 by Empire customers. And then the next sentence,
18 the effective cost for Empire is thus \$711 per
19 kilowatt; is that correct?

20 A. Yes. Thanks for that clarification.
21 So there was a \$711 per KW I referenced a moment
22 ago, and there is actually the breakout of the
23 429 million for Empire and 529 for tax equity.

24 Q. And you can take those numbers and
25 come up with a percentage of the contribution by

1 the tax equity partners from those numbers at least
2 for purposes of your modeling, can you not?

3 A. Again, I think any tax equity
4 questions and percentages would be deferred to
5 Mr. Mooney, but yes, you can come up with simple
6 percentages.

7 Q. You just take the 529 and divide it
8 by the sum of 529 plus 429, and that would give
9 you --

10 A. 958, correct.

11 Q. -- tax equity contribution; is that
12 correct?

13 A. That's my understanding of it.
14 Again, I would defer tax equity questions to
15 Mr. Mooney.

16 Q. But that's what you used for the
17 modeling, right?

18 A. The modeling assumes a \$429 million
19 capital contribution from Empire, yes.

20 Q. Why don't you go ahead do the math if
21 you can, 429 divided by 958.

22 A. 45 percent.

23 Q. That's what you used for purposes of
24 the modeling, right? That was an input?

25 A. The \$429 million capital contribution

1 was an input to the model, yes.

2 Q. But at this point in time, you don't
3 know what the actual tax equity contribution will
4 be, do you?

5 A. I'm not involved in any of the tax
6 equity discussions, and again, I think that's a
7 topic for Mr. Mooney.

8 Q. Well, that was my last question on
9 this topic.

10 A. Perfect.

11 Q. Did you actually do the modeling or
12 was that performed by ABB?

13 A. The modeling is done within the ABB
14 models by ABB.

15 Q. So what was your role? Did you
16 provide inputs, or did you just take the results
17 and testify about them?

18 A. Right. The -- just generally
19 speaking, Charles River Associates does work in
20 this space broadly. I did work very similar to
21 this related to a nuclear plant recently in Georgia
22 that was looking for validation.

23 Q. Pardon me. I'm not asking about your
24 credentials. I'm just asking what it is you did.

25 A. Well, I'm trying to answer your

1 question around the type of work we do in this
2 space. So what I would describe what we did here
3 was to review, identify, translate and explain, and
4 that's very much a function of the work we do on a
5 regular basis. We also do a lot of modeling work
6 and actually are the outsource modeling for NIPSCO
7 on related IRP work just as an example.

8 But I'm happy to talk more
9 specifically about what we did in each of those
10 areas, review, identify, translate, explain.

11 **Q. But you did not provide inputs. Did**
12 **those originate from Empire?**

13 A. Inputs to the modeling vary based on
14 the source. The sources vary. So a number of the
15 inputs came from the 2016 IRP analysis. Some
16 inputs were updated based on ABB's forward price
17 curves, for instance. We provided guidance on some
18 of the scenarios to look at, for instance, a low-
19 coal case or a flat coal scenario. And then
20 updates were provided through the RFP analysis that
21 I described earlier that's contributing to this --
22 the wind cost calculations.

23 **Q. I think you've identified the sources**
24 **of inputs. Who decided which inputs to use or**
25 **which sources of inputs to use?**

1 A. Well, if you could be specific about
2 the input. I can address the ones that I'm
3 referring to. So the price forecasts came from
4 ABB. As I addressed earlier, ABB has been
5 providing price forecasts for Empire and for a
6 subscription-based clientele for many years. So
7 that's one item.

8 **Q. Did Empire select, tell you to use --**
9 **or did Empire select to use the most recent ABB**
10 **forecast for modeling purposes? That's the kind of**
11 **the question I'm asking.**

12 A. Yes. So at the time that this was
13 initiated, Empire used what was the most current
14 ABB price forecast, which was different than what
15 was used in the IRP.

16 **Q. When you did the generation fleet**
17 **savings anal-- or when the generation fleet savings**
18 **analysis was performed, who selected which units**
19 **were allowed to be retired in that analysis?**

20 A. Empire had already decided when we
21 came on board around the specific parameters of
22 which plants could or would be retained for
23 reliability purposes primarily or because they had
24 joint ownership and couldn't make a decision to
25 retire something that was jointly owned or it was a

1 new plant. We, however, reviewed those assumptions
2 and, to the extent we had any disagreements about
3 it, were free to offer an alternative opinion.

4 **Q. Do you know specifically who at**
5 **Empire provided the constraints on plant**
6 **retirements?**

7 A. I don't know specifically, but I know
8 that many of the constraints were similar to what
9 was used in the prior IRP process, but I can't tell
10 you specifically who made that decision.

11 **Q. Was Riverton 10 allowed to be retired**
12 **for the modeling?**

13 A. No.

14 **Q. Was Riverton 11?**

15 A. So Riverton 10, 11 and State Line
16 were not allowed to retire for black start
17 purposes.

18 **Q. Was Riverton 12 allowed to retire?**

19 A. Riverton 12 is a 7,000 heat rate CC
20 that was built in 2016, and it was not allowed to
21 retire.

22 **Q. There are two units at State Line.**
23 **Were either allowed to retire?**

24 A. I mentioned the State Line CT was
25 held for black start purposes, and Blake Mertens

1 can talk more about that if you have specific
2 questions. But the State Line CC was not allowed
3 to retire as well.

4 **Q. Were Iatan 1 or 2 allowed to retire?**

5 A. As I mentioned a moment ago, anything
6 with joint ownership where Empire was a minority
7 owner was not allowed to retire, and that would
8 include Iatan 1 and 2 and Plum Point.

9 **Q. So the units that were permitted to**
10 **retire were Energy Center 1, 2, 3 and 4, Asbury,**
11 **and Ozark Beach 1, 2, 3 and 4; is that correct?**

12 A. I believe that's correct, yes.

13 **Q. For the Stipulation & Agreement, were**
14 **those units allowed to retire?**

15 A. For the modeling that supported the
16 Stipulation & Agreement?

17 **Q. Well, we've gone over the generation**
18 **fleet savings analysis. Was there any difference**
19 **in what was done for the Stipulation & Agreement in**
20 **terms of the units that were allowed to retire, and**
21 **if so, what?**

22 A. No, I don't believe so.

23 **Q. Well, since the agreement includes**
24 **retaining Asbury, I assume it was allowed to retire**
25 **in this stipulation analysis? I think that would**

1 **be a change.**

2 A. Fair enough. So retaining -- in the
3 stipulation, Asbury was forced to be retained.

4 Q. **But the other units were left the**
5 **same?**

6 A. Correct.

7 Q. **Were the Meridian Way or Elk River**
8 **Wind Farm PPAs allowed to be terminated early?**

9 A. When you say early, do you mean
10 before the contract expiration date?

11 Q. **Yes, I do.**

12 A. So Elk River has an extension option,
13 and it was -- the extension was not undertaken, so
14 it expires in 2025, and Meridian Way expires in
15 2028. So those were the years modeled.

16 Q. **So the model didn't allow them to be**
17 **bought out or terminated early?**

18 A. No. There was no buyout clause for
19 the wind PPAs in the modeling.

20 Q. **Do you know if there is in the**
21 **contracts?**

22 A. I'm not aware. I think that's
23 probably a question for Mr. Mertens.

24 Q. **Let's just -- because Empire's**
25 **changed its position now, let's just jump to the**

1 **Stipulation & Agreement. When does the savings**
2 **analysis from that current plan -- or stipulation**
3 **plan show that customers will start to -- Empire**
4 **customers will start to see savings on their bills?**

5 A. Any rates question I would defer to
6 Mr. Holmes, specific rates questions, but I can
7 talk to you about the present value revenue
8 requirement and when that goes positive and talk
9 about the timing of the -- or talk about the 10-,
10 20- and 30-year costs.

11 **Q. When does the present value revenue**
12 **requirement flip in terms of being positive?**

13 A. I believe it's in the first five
14 years you see a positive revenue requirement.

15 **Q. Looks like you're referring to some**
16 **document. What are you looking at?**

17 A. I'm looking at a document that
18 summarizes the stipulation results.

19 **Q. Is that something that's been**
20 **included in some testimony or elsewhere?**

21 A. All of the numbers in here are
22 included in testimony.

23 **Q. Can you point to where in testimony**
24 **the information is that you're referring to in that**
25 **document?**

1 A. Sure.

2 **Q. Would you?**

3 A. So I can refer to my affidavit, and
4 Figure 5 as we talked about earlier shows the
5 20-year savings from the settlement plan it's
6 listed as, but we can also refer to it as the
7 stipulation, in the blue bar and the 30-year
8 savings from the settlement plan. These are the
9 present value revenue requirement savings when
10 comparing the settlement plan to the IRP preferred
11 plan. So 169 million for 20-year savings,
12 295 million for 30-year savings, and there's data
13 that underlies those numbers.

14 **Q. And where is that data?**

15 A. It's in data requests and responses
16 that's been provided to parties.

17 **Q. It's not been provided to the**
18 **Commission, has it?**

19 A. I don't know specifically if the work
20 paper that the -- I believe the work papers that
21 accompany the stipulation have the annual revenue
22 requirements, and we can refer to that, but I'm not
23 certain.

24 **Q. What work papers accompany the**
25 **stipulation?**

1 A. I believe the attachments. I don't
2 see it in the stipulation, so I would defer
3 specific questions to Mr. Holmes on the specific
4 annual revenue requirement reductions associated
5 with the settlement versus the 2016 IRP preferred
6 plan --

7 **Q. Well, I --**

8 A. -- that contribute to the numbers
9 that I cited in my affidavit for the 20-year and
10 30-year savings.

11 MR. NATHAN WILLIAMS: Judge, may I
12 have marked as an exhibit the documents that
13 Mr. McMahon's been I think referring to as work
14 papers, or at least a portion of them, to the
15 stipulation?

16 JUDGE BUSHMANN: Your response,
17 Mr. Cooper?

18 MR. COOPER: Well, I haven't seen
19 what he wants to mark yet.

20 MR. NATHAN WILLIAMS: You know what?
21 I haven't either. I just know Mr. McMahon's been
22 referring to them.

23 JUDGE BUSHMANN: And also the witness
24 is entitled to refresh his recollection.

25 MR. NATHAN WILLIAMS: I think I'm

1 entitled to see what he's --

2 JUDGE BUSHMANN: You're entitled to
3 see it, but I'm not sure that that necessarily
4 makes it an exhibit. So if you'd like to look at
5 it, that's fine.

6 MR. NATHAN WILLIAMS: Thank you.

7 MR. COOPER: Judge, we might be able
8 to take a five-minute break and see if we can
9 discuss this a little bit with Mr. Williams, too.

10 JUDGE BUSHMANN: Do you need some
11 time to review it?

12 MR. NATHAN WILLIAMS: Sure.

13 JUDGE BUSHMANN: We'll be off the
14 record for five minutes.

15 (A BREAK WAS TAKEN.)

16 JUDGE BUSHMANN: Let's go back on the
17 record. If any parties want to tell me something
18 about where we are at this point, I'd appreciate
19 it.

20 MR. NATHAN WILLIAMS: I think I'll
21 just go on asking questions at this point.

22 JUDGE BUSHMANN: Sounds good to me.
23 Thank you.

24 BY MR. NATHAN WILLIAMS:

25 Q. I believe where we left off, I'd

1 asked you when the PVRR flipped for purposes of the
2 stipulation plan.

3 A. Right.

4 Q. And you'd indicated that it would
5 occur within the first five years. Are you able to
6 give a more definitive date than that?

7 A. No. Unfortunately, I'm able to only
8 talk to what's in my affidavit, which does not
9 include the year-by-year present value revenue
10 requirement differences.

11 Q. And you're unable to point to any
12 documentation that's already been prefiled in the
13 case that would show that as well?

14 A. Not that I'm specifically aware of.

15 Q. Did Charles Rivers Associates provide
16 any feedback to Empire regarding the generating
17 units that it chose to force to not be retired?

18 A. So just to confirm the question, so
19 the generating units that were allowed to retire?
20 You said not forced to retire.

21 Q. I misstated. Yes, it would be the
22 units that were selected that were not allowed to
23 retire, did Charles Rivers Associates provide any
24 feedback to Empire regarding, I'll use the word
25 reasonableness of doing so in the modeling?

1 A. I can't recall any conversation that
2 was specific to the choice about Asbury. It had
3 already been made a decision to look at Asbury
4 retirement in light of environmental spending that
5 would have to happen. So we didn't offer an
6 alternative opinion as to not letting the model
7 retire Asbury.

8 **Q. To your knowledge, it was Empire's**
9 **choice to allow the model to retire Asbury?**

10 A. In the 2016 IRP, Asbury was forced to
11 be retained, and it was a -- it was a choice then
12 to allow it to retire early in the GFSA analysis,
13 and I think that choice was initially made by
14 Empire.

15 **Q. Let me ask it this way: Did Charles**
16 **Rivers Associates provide any input to or feedback**
17 **to Empire regarding what of its units should be**
18 **allowed to retire or not to retire in the modeling?**

19 A. Not specifically that I recall,
20 though if we had an alternative view, we could have
21 shared that and potentially been incorporated. But
22 given the decisions made by Empire about which
23 units to retain and the rationale that I discussed
24 earlier, we thought those were reasonable.

25 **Q. Basically -- let me rephrase what I**

1 think you're saying, and you can tell me if I'm
2 correct or not.

3 A. Sure.

4 Q. Essentially what you're saying is
5 that you accepted what Empire provided to you and
6 you did not, I'll use the word challenge it, it's
7 just what you used for the modeling?

8 A. Correct. We didn't offer an
9 alternative opinion to Empire.

10 Q. Aside from the constraints on what
11 generation could be retired by the model, were
12 there any other assumptions, inputs or constraints
13 in the modeling that you have not disclosed in your
14 prefiled testimony?

15 A. Not that I'm aware of.

16 Q. Let's turn your attention to page 22
17 of your direct testimony, lines 1 through 12. I'm
18 sorry. It's lines 10 through 12.

19 A. On page 22?

20 Q. On page 22 of your direct.

21 A. Okay.

22 Q. You testify there, starting in the
23 middle of the sentence, the removal of limits on
24 the amount of energy Empire can sell to the market
25 drove the CEM, which would be the capacity

1 expansion model, to select early wind additions as
2 the least cost outcome across all of the scenarios,
3 correct?

4 A. Correct.

5 Q. Why would you model the utility that
6 is billing its generating units to serve its
7 customers without limiting the amount of energy it
8 is selling into the market?

9 A. Well, Empire is now part of SPP, and
10 as part of SPP it has a lot more flexibility in how
11 it can buy and sell power. A traditional
12 vertically integrated utility that's not operating
13 in an RTO has to rely on bilateral contracts that
14 it might execute by picking up the phone and
15 calling a neighbor.

16 When you're part of an RTO like SPP,
17 you now have an ability to sell market -- well, you
18 do sell your power, all of your power in your
19 generation into a centralized market and you buy
20 generation back to serve your load.

21 So it's a very different situation
22 than what I would call the traditional Empire
23 resource planning looked at, and that's why a new
24 paradigm was developed in this modeling where there
25 weren't strict limitations placed on the amount of

1 generation that could be sold that's in excess of
2 what meets specifically Empire's demands.

3 **Q. Isn't it a, I think I'll use the word**
4 **premise of that kind of a model that Empire is not**
5 **owning and contracting sufficient capacity and**
6 **energy just to serve its retail customers?**

7 A. I guess what I would say is for any
8 utility resource planning exercise where you're
9 involved in an RTO in a centralized market, the
10 analysis would be done in exactly the same way.
11 You wouldn't place restrictions on purchases,
12 outside purchases or on sales from your generation
13 because you're operating with this centralized
14 market in mind.

15 **Q. Doesn't Empire as a vertically**
16 **integrated utility subject to the Commission's**
17 **jurisdiction for rate regulation have an obligation**
18 **to assure that it has sufficient energy and**
19 **capacity to serve its rate-regulated customers**
20 **within Missouri?**

21 A. Of course, and as part of being
22 within SPP, it must meet a capacity requirement
23 with its customers for meeting its customer
24 demands. And so it must prove that it has met that
25 capacity requirement with either owned resources or

1 purchased resources.

2 Q. Are you suggesting that this
3 Commission should rely on the SPP for what Empire's
4 capacity requirement should be?

5 A. For setting Empire's capacity
6 requirement?

7 Q. I'm not saying setting. For saying
8 that it has sufficient capacity. The Commission
9 does have mechanisms available to it to assure that
10 the utilities it regulates are in a position to
11 provide safe and adequate and reliable service?

12 A. Yes. The Commission can choose to
13 require Empire to satisfy a very high capacity
14 requirement well beyond its load. It can also
15 choose to let Empire strictly meet what SPP
16 considers as necessary for reliability. But if
17 you're going to participate in SPP, you have to
18 meet certain requirements.

19 Q. Well --

20 A. Which Empire does.

21 Q. By the Commission allowing Empire to
22 participate in SPP, hasn't it already at least, I
23 guess at least indirectly approved the SPP capacity
24 requirement for Empire?

25 A. Yes, I think in choosing to be part

1 of SPP and gaining Commission approval for that
2 decision, you are choosing to comply with SPP, but
3 I think the Commission's free to set additional
4 restrictions or constraints or requirements that go
5 beyond SPP.

6 Q. I want to turn your attention to the
7 same page of your direct testimony but starting on
8 line 16 where you talk about how Empire constrained
9 the amount of wind that could be built to prevent
10 the model from building an unlimited amount of
11 capacity.

12 A. Yes.

13 Q. And then you go on talking about how
14 in the SPP integrated marketplace physical
15 restrictions on off-peak energy production are no
16 longer constraining since all generation is sold
17 into the wholesale market. Do you see that? It's
18 that last paragraph.

19 A. On the next page as well.

20 Q. Yeah, that flows over to page 23.
21 Will not demand for energy in the SPP wholesale
22 market be depressed when Empire is experiencing low
23 demand off-peak periods?

24 A. When Empire specifically is
25 experiencing low demand? I think it's a broader

1 question around SPP's load and depending on the
2 location of the generation.

3 **Q. Isn't it reasonable that if Empire's**
4 **experiencing low demand on off-peak periods, that**
5 **SPP, the wholesale market and SPP will be**
6 **depressed, in other words, that other entities will**
7 **be experiencing the same reduction in demand?**

8 A. I can't say for certain, but
9 certainly there's hourly load shapes that probably
10 look reasonably similar across utilities, but
11 there's differences. Some utilities have, you
12 know, greater penetration of certain electric
13 heating demand. So I can't say specifically, but
14 as a general statement, I think off-peak periods
15 and on-peak periods tend to line up.

16 **Q. And doesn't negative pricing in the**
17 **SPP market typically occur when there is low demand**
18 **during off-peak periods in the SPP?**

19 A. Right. So negative pricing is a
20 function of primarily wind bidding into a market
21 where it's bidding in its production tax credit
22 amount, because if it can produce, it can generate
23 a production tax credit, so it's willing to take a
24 negative price. We see negative prices not
25 typically across all of SPP. We see them in

1 congested spots.

2 So the answer, I think, to your
3 question, it would just depend on where the
4 location of the negative pricing due to the
5 generation was versus the Empire load.

6 **Q. Would you explain what you mean by**
7 **congested spots?**

8 A. Sure. So congestion is just a
9 function of any operating market. As I mentioned
10 before, we have -- we had traditionally bilateral
11 markets where there wasn't a lot of price
12 transparency between regions because energy was
13 being bought and sold by people on phones.

14 Now we have RTOs where power can be
15 instantaneously exchanged among a bunch of market
16 participants, and it's going to flow to -- from the
17 generators to the demand spots unless there are
18 transmission constraints. And so when there are
19 transmission constraints and you have a lot of
20 generation that wants to get to a load and it can't
21 get there, you have what's called congestion.

22 And so on the load side you might
23 have higher prices, and on the generation side you
24 might have lower prices, which is what we modeled
25 when we modeled what was referred to as the low

1 LCOE versus the mid LCOE.

2 Q. Your answer referring to getting
3 negative prices because of the production tax
4 credit, I think you used the term PTC, but I assume
5 that's what you meant?

6 A. Yes.

7 Q. If SPP starts making wind
8 dispatchable so that it can constrain wind
9 production from entering into the market, won't
10 that reduce the number of production tax credits --
11 if that occurs, won't that reduce the number of
12 production tax credits that in this case, under the
13 stipulation, the tax equity partner is to receive?

14 A. I think that specific question is
15 probably best for Mr. Mertens and Mr. Mooney on the
16 tax equity and on the curtailment specifically
17 risk. What I can answer is how curtailment was
18 factored in to the long-term modeling through some
19 of the basis analysis. So I'm happy to answer
20 questions about that.

21 Q. Do you know if, if there is a
22 curtailment, is there a PTC created?

23 A. I would assume if you're not
24 producing you're not generating a PTC.

25 Q. And is it your understanding, or

1 maybe you know, although I heard your preference to
2 defer it to someone else, if -- you spoke earlier
3 in response to some questions from Staff about the
4 customer protections pertaining to market pricing
5 and constraints that might be imposed on the market
6 on dispatch of wind, making wind dispatchable as
7 opposed to a must take. Do you recall that?

8 A. I recall being asked a question about
9 the market protection that was in place and whether
10 that was a mitigant against low prices.

11 Q. Well, there were also, I believe,
12 questions relating to wind being -- becoming
13 dispatchable and the impact that would have on
14 revenues to Empire as a result or ultimately
15 flowing to Empire under the agreement, correct?

16 A. Yes.

17 Q. But do you know anything about what
18 happens with the production tax credits that are
19 associated with those? Because my understanding is
20 that the tax equity partner is supposed to get a
21 degree of its compensation from production tax
22 credits.

23 A. I'm sorry, but I think I'm going to
24 have to defer that to Mr. Mooney on the tax equity.

25 Q. Okay. On page 23 of your direct

1 testimony, around lines 4 to 7, you testify about
2 Empire constraining the model to cap total
3 nameplate wind capacity in the portfolio to a level
4 roughly equivalent to peak load. Do you recall
5 that?

6 A. Yes.

7 Q. Did that constraint eliminate risk to
8 Empire's customers?

9 A. The modeling that we ran that
10 constrained the wind to that level did show risk
11 reduction to Empire customers. It showed both cost
12 savings and risk reduction when looking at the
13 range of scenarios that were used in this analysis.

14 Q. Well, there were some constraints in
15 those analyses, were there not? We talked about
16 what was allowed to retire, for example.

17 A. Sure. I've been doing modeling for
18 20 years, and there's always constraints in
19 modeling analysis, and yes, there were constraints
20 in this analysis, too.

21 Q. Does reducing the amount of wind to
22 be built from the 800 megawatts to the
23 600 megawatts reduce the risk to Empire's
24 customers?

25 A. No. Well, first of all, the

1 600 megawatt case was accompanied by retaining
2 Asbury, and what we've shown in my affidavit is
3 that retaining Asbury and moving to 600 megawatts
4 actually is more costly.

5 But we've also done the risk
6 analysis, an updated risk analysis as part of this
7 stipulation, and in my affidavit on page --
8 Figure 2 on page 5, I illustrate the risk reduction
9 by showing three different scenarios, a base
10 market, a high market and a low market for both the
11 2016 IRP plan and the stipulation. And what this
12 shows is that in all three scenarios there is cost
13 savings in the stipulation plan relative to the
14 2016 IRP plan.

15 I think that's very important, No. 1,
16 that there's cost savings, but No. 2, and to
17 specifically address your question, there is also
18 lower risk. I think your question may have been
19 nuanced around how the risk difference between
20 going from 800 to 600 megawatts, and because of the
21 differences in the data and the combination of the
22 portfolios, I can't speak to the specific risk
23 reduction between 800 megawatts and 600 megawatts.
24 But I can illustrate with this graphic that in the
25 stipulation plan it's lower risk and it's lower

1 cost.

2 Q. With regard to the GFSA, didn't
3 Empire -- it looks like you're the responsible
4 party for providing the response -- say that the
5 savings from retiring Asbury are 26 million over
6 20 years and 90 million over 30 years with regard
7 to the GFSA, the 800 megawatt plan that was done in
8 the application?

9 A. Yes, the GFSA that used the 2016 ABB
10 price curves described what you said, which was the
11 \$26 million in savings.

12 Q. What are you saying the -- under the
13 stipulation scenario of the savings attributable to
14 retiring Asbury as opposed to not retiring it are
15 now?

16 A. Right. And this goes to a question
17 Commissioner Rupp had earlier, and it's illustrated
18 in my affidavit. I believe it's item 9. Page 7,
19 item 9, it says Figure 5 shows a difference in
20 20-year and 30-year present value revenue
21 requirement savings using common assumptions. On a
22 30-year basis, approximately 38 million of the
23 difference relates to the difference in size of the
24 wind addition, that's going from the 800 to the
25 600, while the remaining portion, 101 million,

1 relates to the retirement of Asbury.

2 **Q. So why is there such a big difference**
3 **between the GFSA where you said the amount**
4 **attributable to Asbury 9 million and now you're**
5 **saying with the stipulation plan it's 101 million?**

6 A. Sure. As I had said a second ago,
7 the GFSA used the 2016 fall ABB price curves, and
8 the settlement used the ABB 2017, fall 2017 price
9 curve, which as we established earlier through some
10 questions is lower. And in a low market
11 environment, a coal plant that was already
12 dispatching at only 65 percent capacity factor for
13 2017 gets hurt more. So you're looking at about
14 \$10 million a year from memory of incremental cost.

15 **Q. Shouldn't the Commission take from**
16 **this that the inputs and the assumptions in the**
17 **modeling can make huge differences in the results?**

18 A. I think the -- any decision --

19 **Q. I think that's a yes or no response.**

20 A. Could you repeat the question?

21 **Q. Should the Commission conclude from**
22 **this that the changes in the inputs in the modeling**
23 **can have big impacts on the results? That's what**
24 **occurred, isn't it?**

25 A. I would agree that changing an input

1 in a model can have an impact on the results, and
2 it can be charge if one of the inputs is large and
3 changed.

4 Q. And whenever you're talking about 20
5 and 30 years, you're talking about some pretty big
6 numbers, aren't you, can be, PVRR?

7 A. Over 20 and 30 years, when you're
8 taking a present value revenue requirement and
9 you're calculating the present value of each year's
10 revenue requirement, so that sums to a larger
11 number than certainly one year.

12 Q. Give me a moment. Turn your
13 attention to page 24 of your direct testimony,
14 line 7 to 8 in particular.

15 A. Yes.

16 Q. And starting toward the middle of
17 line 7, you testified there is now enough nodal
18 pricing data after three years of markup operation
19 to provide confidence in the nodal modeling,
20 correct?

21 A. Yes, that's what I stated.

22 Q. How much confidence does three years
23 of data provide?

24 A. It's three years of historic data
25 that I think provide some indication, provides an

1 indication of nodal pricing differences. As I
2 mentioned before, lots of nodes across SPP. We
3 know there's congestion depending on constraints.
4 And three years of data using averages provides
5 confidence that we're capturing those nodal
6 differences certainly as they exist today, and I'm
7 happy to tell you about how we looked at those real
8 specifically in the modeling.

9 Q. I'm going to turn your attention to
10 page 3 of your surrebuttal testimony.

11 A. 3?

12 Q. Hopefully, if I have the pagination
13 correct. I had some line numbers wrong before, so
14 my confidence is shaken a little.

15 If you read line 6 to 9 on page 3.
16 Paraphrasing that, you testify that Empire's plan
17 will yield, quote, significant near-term benefits
18 for customers, close quote, do you not?

19 A. Yes.

20 Q. This is, of course, referring to the
21 original plan for 800 megawatts?

22 A. Correct.

23 Q. What significant near-term benefits
24 for customers were you referring to in that
25 testimony?

1 A. The revenue requirement differences
2 between the RFP -- or sorry, the IRP, 2016 IRP
3 preferred plan and the GFSA customer savings plan.

4 **Q. Is that all?**

5 A. Well, talking specifically to cost
6 and what relates to the 325 million. There's also
7 benefits that I've described around turning a
8 portfolio that is 85 percent fossil to a portfolio
9 that's 60 percent fossil and 40 percent renewable.
10 So I think those are some of the benefits that I
11 might have also been referring to here.

12 **Q. And are those the same benefits that**
13 **you see from the stipulation plan, the 600**
14 **megawatts?**

15 A. Well, speaking to the taking --
16 moving from a portfolio that is predominantly
17 fossil with significant fuel cost risk to a
18 portfolio that has a significant non-fuel renewable
19 element, yes, I think that's accomplished with a
20 600 megawatt portfolio of wind, in addition to what
21 Empire already has.

22 **Q. You did say significant near-term.**
23 **The PVRR's more longer term, is it not?**

24 A. Well, the present value revenue
25 requirement is capturing however many years are

1 incorporated in the present value calculation, so
2 it's as many years as are described. So here is
3 describing a 20-year present value revenue
4 requirement of \$325 million in savings.

5 **Q. So the economic benefit may not be --**
6 **well, I guess it depends on how you define near-**
7 **term. Is 20 years near-term in your view?**

8 A. Well, if the only benefit was in year
9 20, it would be heavily discounted and I doubt
10 would get us to a \$325 million benefit. So I
11 believe there were benefits in all years and time
12 periods, but I need to refer to specific
13 spreadsheets.

14 **Q. Turn your attention to page 4 of your**
15 **surrebuttal testimony, in particular lines 18**
16 **through 20. In part you testify there, the hefty**
17 **tax credits that make the benefits so clear and**
18 **convincing for Empire are schedule to phase out**
19 **soon, correct?**

20 A. Correct.

21 **Q. Haven't those tax credits been**
22 **available at least since 1994?**

23 A. There's been tax credits available,
24 but the capital cost of wind has not been nearly
25 what it is today.

1 Q. I think you touched on this theme
2 before, but on page 5, at lines 5 to 6 you testify
3 wind reduces portfolio risk because, relative to
4 conventional resources, wind's costs are more
5 certain.

6 A. That's correct.

7 Q. Does not wind increase portfolio
8 reliability risk because wind is intermittent
9 relative to conventional resources?

10 A. Well, I think part of the answer to
11 this question goes back to SPP is the central
12 operator of the grid that is handling reliability
13 issues. The intermittency is more a function of
14 when you need the power and what price it's being
15 sold at.

16 Q. Aren't we talking about -- well, I'm
17 talking about Empire's -- well, try this again.

18 For Empire particular utility, does
19 not adding wind increase portfolio reliability risk
20 because wind is intermittent relative to the
21 conventional resources Empire has?

22 A. I define reliability in terms of
23 outages and performance of a grid. I don't define
24 it in relation to Empire's portfolio reliability.
25 So the grid, I don't believe this wind that we're

1 suggesting adding to SPP is creating reliability
2 issues, but I'd suggest you ask Mr. Mertens about
3 that. And any reliability questions for Empire I
4 would characterize on the distribution side, which
5 are unrelated to this.

6 **Q. So you don't think that reliability**
7 **plays any role with regard to generation?**

8 A. Reliability is an extremely important
9 aspect of a functioning grid in a functioning RTO,
10 and SPP's role is ensuring reliability by setting
11 reliability standards and ensuring that all
12 generation adheres to that. That's the function of
13 the grid, and that's how I see reliability as being
14 important. I'm not sure I understand what your
15 question's getting at.

16 **Q. Well, it's kind of like if I go**
17 **outside and I want to go home and I'm using a**
18 **vehicle, I kind of like for it to start and that's**
19 **reliability.**

20 A. Okay.

21 **Q. And if I'm Empire and I need to**
22 **have -- meet a certain load at a certain point in**
23 **time, then I need to have the power available to do**
24 **that. And I think there is a difference in the**
25 **capability of different resources to supply that**

1 power at that time to meet that load.

2 A. So --

3 Q. And that's the kind of reliability
4 I'm --

5 A. I understand your question. So if
6 this was five years ago, then I think my answer to
7 your question would be different, and it would be
8 specific to Empire as a vertically integrated
9 utility in its own balancing authority and having
10 to make its own decisions about how to ensure
11 reliability for its specific customers and doing
12 bilateral deals.

13 I assume that Mr. Mertens and others
14 could talk to how they would have managed that back
15 then. But when you're in an RTO, the generation,
16 all of the generation is part of the RTO, and the
17 RTO is responsible for serving the load in that
18 RTO. So that becomes an RTO requirement, not an
19 Empire specific requirement beyond what Empire's
20 requirements are to have -- to meet its reserve
21 margin requirements for SPP.

22 Q. So you don't believe that Empire has
23 an obligation to be able to meet its load in
24 Missouri separate and apart from SPP?

25 A. Empire has an obligation to meet its

1 load by proving to SPP and to this Commission that
2 it has sufficient capacity and can deliver energy.
3 The energy can be bought through SPP. It is bought
4 through SPP, but it can be specifically tied to an
5 Empire resource or not.

6 Q. Turn your attention to, hopefully
7 it's page 26 of your surrebuttal, and in particular
8 the Q and answer that starts on line 5 and ends on
9 line 12.

10 A. Okay.

11 Q. Am I correct that what you're saying
12 there is that a three-year shift in the period that
13 was analyzed caused a \$120 million change in the
14 PVRR?

15 A. Yes, I think you read that correctly.

16 Q. And isn't that over a 75 percent
17 increase from the lower amount?

18 A. I would have to check these numbers,
19 but I'm assuming that the 2015 to 2018 portion of
20 this would not have been discounted. So that's
21 probably contributing a significant portion to it.
22 But yes, I would agree with your math, and subject
23 to check on some of the details here.

24 Q. Turn your attention to page 30 of
25 your surrebuttal testimony, first two lines of the

1 footnote. There you indicate you have some
2 familiarity with Ameren Missouri's latest
3 integrated resource planning filing with this
4 Commission, do you not?

5 A. What question -- oh, sorry. The
6 first -- Footnote 11?

7 Q. If you want to look at the question
8 that goes with that answer, it starts on page 29,
9 but yes, and in particular Footnote 11 references
10 Ameren Missouri's resource planning filing.

11 A. Yes.

12 Q. Are you aware that Ameren Missouri
13 plans to add 700 megawatt of wind generation in the
14 near future?

15 A. I am, through news reports.

16 Q. Do you know why Ameren Missouri plans
17 to add that 700 megawatt of wind generation?

18 A. I can't comment specifically.

19 Q. Does that mean you don't know?

20 A. I don't know specifically why Ameren
21 wants to add 700 megawatts.

22 Q. I don't know the fine answer. If you
23 don't know, that's what I want to hear.

24 A. Right. I think the question was do
25 other utilities use the same or similar forecasting

1 process, and I indicated that they use the
2 ABB/Ventyx power price forecast.

3 Q. And you also made a reference to
4 Ameren Missouri's resource planning filing with
5 this situation. I'm just asking some questions
6 about it. If you don't know, that's fine.

7 A. I don't have any specific information
8 or knowledge of Ameren's filing.

9 Q. That's fine. Thank you. I'm going
10 to turn your attention to page 39 of your
11 surrebuttal testimony, below the figure that
12 appears on that page.

13 A. Sure.

14 Q. You testified that it does not
15 concern you that Empire will be selling more energy
16 into the SPP market than its customers buy out of
17 the market if the Commission implements the GS-- or
18 if Empire implements the GFSA, correct?

19 A. That's correct.

20 Q. And that would be the case even with
21 the stipulation plan as well, correct?

22 A. That there would be more energy sold
23 from Empire generating resources than what's
24 purchased by load, yes.

25 Q. Shouldn't this Commission be

1 concerned with the potential impacts on Empire's
2 customers and their electric utility bills from
3 Empire caused by Empire acquiring more rate base
4 generation so that it can sell even more energy
5 into the SPP market than its customers buy out of
6 the market?

7 A. The figure right above the question,
8 Figure 8 on page 39, addresses this issue, which is
9 similar to what I said earlier around the
10 stipulation, which is that in all -- in the high
11 market, base and the low market cases, not only
12 does the customer savings plan reduce cost, but it
13 also reduces risk. So I don't think the Commission
14 should be concerned about that.

15 Q. I want to turn your attention to
16 page 42 of your surrebuttal testimony, Footnote 19.
17 See that?

18 A. Yes, I do.

19 Q. You refer to a correction, do you
20 not?

21 A. I do. It says the \$26 million in
22 savings is from plan 4B, which includes a
23 correction to plan 4.

24 MR. NATHAN WILLIAMS: May I have an
25 exhibit marked and approach the witness?

1 JUDGE BUSHMANN: You may. I think
2 your next number is 212.

3 (OPC EXHIBIT 212 WAS MARKED FOR
4 IDENTIFICATION BY THE REPORTER.)

5 BY MR. NATHAN WILLIAMS:

6 Q. I'm handing you what's been marked
7 for purposes of identification as Exhibit 212.
8 Have you had an opportunity to review Exhibit 212?

9 A. Generally. Is there a specific page
10 you'd like me to reference?

11 Q. Actually, I'm just going to ask you a
12 question about it, and there's a memorandum
13 attached to that exhibit that indicates that it
14 originated from you.

15 A. Correct. I did produce this.

16 Q. And does that memorandum explain the
17 correction that you referred to in Footnote 19 of
18 your surrebuttal testimony?

19 A. Yes, it does.

20 MR. NATHAN WILLIAMS: I offer
21 Exhibit 212.

22 JUDGE BUSHMANN: Any objections?

23 MR. COOPER: I guess I'm confused.
24 Does the cover sheet go with the Staff DR response
25 that's inside of it?

1 MR. NATHAN WILLIAMS: Actually, this
2 was produced in response to Public Counsel's data
3 request, so yes, it does. I think the response was
4 see Staff data request.

5 MS. FORCK: When you refer to the
6 memorandum, are you talking about the one on
7 page 3?

8 MR. NATHAN WILLIAMS: Yeah.

9 MR. COOPER: I guess I'm -- I guess
10 I'm still confused. I'm not -- as to an answer to
11 all four?

12 MR. NATHAN WILLIAMS: Let's just pull
13 it off. We can go to the memorandum if you'd like.

14 JUDGE BUSHMANN: Tell me what's going
15 on.

16 MR. NATHAN WILLIAMS: Remove the
17 first sheet.

18 JUDGE BUSHMANN: The top sheet that
19 says Public Counsel Data Request Nos. 8543 through
20 8547, that should be removed?

21 MR. NATHAN WILLIAMS: Yes. And the
22 rest of the exhibit stays the same.

23 JUDGE BUSHMANN: With that change, is
24 there any objection to introduction of that
25 exhibit?

1 MR. COOPER: No, your Honor.

2 MS. FORCK: Just to be clear what
3 we're looking at, this is Staff's data request and
4 then Mr. McMahon's response?

5 MR. NATHAN WILLIAMS: I'm not sure
6 it's the entirety of the response. The point is
7 just to clarify the footnote, and that's the
8 purpose for which it's being offered.

9 JUDGE BUSHMANN: Any objection from
10 Staff?

11 MS. FORCK: No, your Honor.

12 JUDGE BUSHMANN: Exhibit 212 is
13 admitted.

14 (OPC EXHIBIT 212 WAS RECEIVED INTO
15 EVIDENCE.)

16 BY MR. NATHAN WILLIAMS:

17 Q. Does Empire's analysis for the
18 stipulation sufficiently account for the
19 intermittency of wind?

20 A. I'm sorry. Is this related to this?

21 Q. No.

22 A. Okay.

23 Q. I think that speaks for itself.

24 A. Okay. Could you repeat the question?

25 Q. Does Empire's analysis for the

1 stipulation sufficiently account for the
2 intermittency of wind, wind generation?

3 A. Yes, it accounts for the
4 intermittency of wind generation.

5 Q. How does it do that?

6 A. The wind projects are modeled using
7 their profiles, their wind profiles in terms of
8 when they would tend to produce and tend to not
9 produce to get you to that levelized 47 percent
10 capacity factor.

11 Q. I don't believe I fully understand
12 your answer. You're saying you took the wind --
13 the production profiles over hourly for a year and
14 used the 47 percent capacity factor? Can you
15 explain more of what you mean?

16 A. Sure. There's hourly shapes
17 associated with these locations, with these wind
18 projects that are incorporated into the model to
19 understand the hourly -- an hourly level when these
20 plans, when these wind farms will produce and when
21 they will not produce.

22 MR. NATHAN WILLIAMS: Can I have
23 another exhibit marked? This is -- it says on the
24 document it's affidavit of John A. Robinett. May I
25 approach the witness?

1 JUDGE BUSHMANN: You may. That
2 exhibit will be 213. Isn't this something that had
3 already been premarked?

4 MR. NATHAN WILLIAMS: I don't believe
5 so. No. It's a different affidavit.

6 JUDGE BUSHMANN: This is the one that
7 was filed today?

8 MR. NATHAN WILLIAMS: Yes.

9 JUDGE BUSHMANN: So that would be
10 213.

11 MR. COOPER: Does counsel have copies
12 I guess of the exhibit?

13 MR. NATHAN WILLIAMS: Yes. May I
14 approach?

15 JUDGE BUSHMANN: Yes. You don't have
16 to ask.

17 (OPC EXHIBIT 213 WAS MARKED FOR
18 IDENTIFICATION BY THE REPORTER.)

19 BY MR. NATHAN WILLIAMS:

20 Q. I'm handing you what's been marked
21 for identification as Exhibit 213. Would you
22 ignore the first page but turn to the second page.
23 There's a graph there, and the title of it says
24 total load versus estimated 855 megawatt wind
25 production 1/18/2016 winter peak. I want to direct

1 your attention to the curve that -- not the bars
2 but the line curve that says estimated wind
3 production. Does that curve shape -- you talked
4 earlier about using curve -- wind production
5 curves. Does that curve shape look like a typical
6 wind production curve over a 24-hour period?

7 A. Does one represent 1 a.m.?

8 Q. Yes. Assume it's 24 hours starting
9 from midnight to midnight. Actually, there are a
10 series of such curves. I'm just asking you if they
11 look representative of what you've seen of
12 different types of wind production at different
13 points in time. I'm not trying to spring something
14 on you.

15 A. So I'm just reading the front of the
16 affidavit. Says this is related to Elk River and
17 Meridian Way, but they're not labeled. I can't
18 comment. I honestly --

19 Q. I'm not asking you if these are
20 Meridian Way and Elk River. I know how they were
21 created. All I'm asking you is if this kind of a
22 shape for a 24-hour period is the sorts of shapes
23 that you are familiar with seeing from wind farm
24 production? If you don't know --

25 A. Shapes are seasonal and very region

1 dependent. So I can't comment specifically on
2 this. I'm sorry.

3 **Q. Okay.**

4 A. I mean, there's all different shapes
5 here, and they're ostensibly talking about
6 different time periods, but I -- I mean, I could
7 describe a wind curve generally, but I'm not sure
8 that accomplishes much relative to this.

9 **Q. All I was asking is if these are the**
10 **kinds of curves you see from wind farms producing**
11 **on -- it can vary that much from day to day, but**
12 **these are the kinds of typical -- I don't know if**
13 **typical is the right word, but you wouldn't be**
14 **surprised if these were actual wind production**
15 **curves because of the shapes they reflect?**

16 MR. COOPER: I'm going to object. I
17 think Mr. McMahon said he doesn't know. I don't
18 know how many times we'll go back to that.

19 JUDGE BUSHMANN: Response,
20 Mr. Williams?

21 MR. NATHAN WILLIAMS: I think he's
22 trying to do more with the exhibit than I'm asking
23 him to is what I think's occurring. All I'm trying
24 to --

25 JUDGE BUSHMANN: It seems to me that

1 in response to your question he said he couldn't
2 answer it. Is there another question about that
3 that you wanted to pose?

4 BY MR. NATHAN WILLIAMS:

5 Q. Let me try to ask my question again
6 and see, maybe rephrase a little bit differently.
7 All I'm asking him is if -- what I'm trying to ask
8 him and the only answer I'm trying to get is if
9 these -- what's an orange curve shape would be
10 unusual for a wind farm production for a 24-hour
11 period.

12 And there are several different ones,
13 and I'm not asking that any -- if these are just
14 typical and general. You wouldn't be surprised to
15 see this kind of a 24-hour curve from a wind farm?

16 A. Let me just state generally what I
17 would expect. A number of years ago if you asked
18 me to shape a wind curve I would say it goes way up
19 in the off-peak periods when the wind's blowing the
20 hardest and it drops lower in the on-peak periods.
21 But I think with the new technologies and a lot
22 better identification of wind sites, we get a very
23 different picture as to when wind can actually
24 generate and be reliable.

25 So I can't comment specifically to

1 these because every shape is different on here. So
2 I'm not sure what you'd like me to respond other
3 than what I just did.

4 **Q. Well, is it unusual to have a lot of**
5 **variability in the wind shapes for different**
6 **24-hour periods?**

7 A. I think it's very dependent on the
8 wind, the wind resource, the height of the
9 turbines, the location. There's so many factors
10 that -- the time of year. And so yes, there's
11 variability. It's an intermittent resource that
12 spins when there's wind blowing.

13 But as you know and as we've stated
14 in our testimony, or my testimony, these capacity
15 factors have risen over time, performance is much
16 better, the wind turbines are taller. There's a
17 lot of evolution in this space.

18 **Q. Thank you. Did the analysis Empire**
19 **conducted for its generation fleet savings**
20 **analysis, is that as robust as the analyses**
21 **Empire's performed for complying with the**
22 **Commission's Chapter 22 resource planning rules?**

23 A. I think generally speaking, and it's
24 a legal question which I think can be directed to
25 someone else whether Empire was required to comply

1 with Chapter 22, but generally speaking, I think we
2 complied with all the aspects of Chapter 22 as I
3 recall it.

4 **Q. That's not what I asked. I asked if**
5 **the analyses that were performed are as robust as**
6 **the analyses that are required by -- or that Empire**
7 **performed for the Commission's Chapter 22 resource**
8 **planning rules.**

9 A. Oh, I see. You didn't ask whether
10 they complied with Chapter 22 but was the analysis
11 as robust?

12 **Q. Correct.**

13 A. So my answer is yes, from a modeling
14 perspective and from the areas that I was focused
15 and I directed, this was taking a model that had
16 been used for the 2016 IRP, updating certain key
17 assumptions specifically related to the wind
18 resource, and generating an updated analysis that
19 reflected these new assumptions.

20 So I think it was robust in that it
21 used the same modeling framework, updated some
22 assumptions, looked at uncertainty in stochastics.
23 That's how I would define robust.

24 **Q. Turn your attention to your**
25 **affidavit, which has been marked for identification**

1 as Exhibit 8C, in particular paragraph 3 on page 3.
2 There you state, adding up to 600 megawatt of wind
3 to Empire's portfolio is expected to generate
4 customer savings because the levelized cost of the
5 wind is significantly lower than the forecasted
6 price paid for energy in Southwest Power Pool,
7 correct?

8 A. Yes.

9 Q. As part of its stipulation, is Empire
10 guaranteeing that the actual levelized costs of the
11 wind will be significantly lower than the price
12 paid in the Southwest Power Pool for the energy
13 generated by that wind?

14 A. Could you repeat the question?

15 Q. Maybe. Is Empire guaranteeing as
16 part of its Stipulation & Agreement that the actual
17 levelized cost of the wind generated by the
18 600 megawatts will be significantly lower than the
19 price paid in the Southwest Power Pool for the
20 energy generated by that wind?

21 A. I think I can answer your question.
22 So Empire's market price protection is insuring --
23 well, is protecting customers in the event that
24 prices are significantly lower than expected.

25 Q. Is that a guarantee that the actual

1 levelized cost of the wind will be significantly
2 lower than the price paid in the Southwest Power
3 Pool for the energy generated by the 600 megawatts
4 of wind?

5 A. So the -- I think I understand your
6 question, and it's whether the price that Empire
7 will receive from the wind sales in SPP, whether
8 Empire through its market price protection is
9 guaranteeing a price that is below the LCOE of the
10 wind resource; is that right?

11 Q. No, that isn't what I was asking.

12 A. Okay.

13 Q. I wasn't referring to the -- except
14 to the extent it does so, I wasn't referring to the
15 customer protections in the agreement. I'm just
16 asking, in the agreement is Empire guaranteeing
17 that customers will be held harmless if the actual
18 levelized cost of the wind is -- or if the actual
19 cost of the wind is not significant -- hang on.

20 What I'm asking is if in the
21 stipulation Empire's guaranteeing that what Empire
22 gets in terms of a price for the wind in the
23 Southwest Power Pool, the energy, is significantly
24 higher than the actual levelized cost of the wind,
25 the production of the wind energy?

1 A. So the stipulation -- the stipulation
2 is providing some protection against the downside
3 risk of the price that Empire receives in the SPP
4 being lower than is expected, and basically looking
5 at the wind revenue requirement in each year versus
6 the amount of revenue that is received from selling
7 the wind into SPP. And to the extent that that
8 difference is not positive, that's what relates to
9 the market price protection.

10 **Q. I'm not asking about the market price**
11 **protection per se. I'm asking whether or not**
12 **Empire is protecting its customers if the**
13 **projections are wrong basically.**

14 A. But that's effectively what the
15 market price protection does. As I stated, it's
16 protecting customers against in the event that
17 market revenues are lower than the expected case,
18 expected case being as I show in my affidavit,
19 customer savings in the 20 and 30-year NPV numbers
20 that we talked about earlier.

21 **Q. But there's a limitation on that**
22 **protection, is there not?**

23 A. Yes. And I'm not the one to talk
24 specifically about the stipulation. I reserve that
25 for Mr. Holmes or Mr. Krygier, but I'm happy to

1 talk about the customer savings that are generated
2 from the model in relation to that.

3 Q. Turn your attention to paragraph 4 on
4 page 4 of your affidavit. There you state, in a
5 rising market price environment, Empire would be
6 able to sell wind output at higher prices without
7 any incremental fuel costs. What happens in a flat
8 market price environment?

9 A. I think I would just -- the sentence
10 would say in a flat market price environment,
11 Empire would sell wind output at those prices
12 without any incremental fuel costs.

13 Q. And what happens in a declining
14 market price environment?

15 A. Right. So it would sell at the lower
16 prices in a declining market environment, still
17 without any incremental fuel costs.

18 Q. Do you have Public Counsel witness
19 Lena Mantle's affidavit with you?

20 A. I do.

21 Q. Would you look at pages 133 to 136 of
22 the attachment?

23 A. Okay.

24 Q. Do those show your responses to the
25 Office of the Public Counsel's Data Requests 8,551

1 and 8,552?

2 A. Yes. Yes, they do.

3 Q. And does that explain what you
4 intended the purpose of Figure 3 on page 6 of your
5 Affidavit in Support of the Nonunanimous
6 Stipulation & Agreement to do?

7 A. Well, this adds in the -- this adds
8 in the retirements that we talked about earlier
9 into that figure.

10 Q. So this is the same as the figure in
11 your affidavit except that now the retirements that
12 would occur under those scenarios are included?

13 A. I think this includes the Energy
14 Center 1 and Energy Center 2 and the Riverton -- it
15 includes all the retirements. It doesn't include
16 the contract expirations.

17 Q. I'm going to turn your attention to
18 page 7 of your Affidavit in Support of the
19 Nonunanimous Stipulation & Agreement, in particular
20 paragraph 9.

21 A. Okay.

22 Q. And there you state, I updated the
23 assumptions of the GFSA to be consistent with the
24 assumptions used to evaluate the stipulation. Then
25 on the following -- in the following paragraph on

1 page 8, paragraph 10, you state, in the second
2 sentence, I believe, two sets of assumptions were
3 updated: One, the cost of acquiring and operating
4 wind; and two, the fuel and market price
5 assumption, correct?

6 A. Yes.

7 Q. Was the GFSA based on market prices
8 at the Elk River node?

9 A. The GFSA had a number of different
10 plans. Plan 2, which had 800 megawatts of wind,
11 used low LCOE wind, which was at the Elk River
12 node.

13 Q. Is that the only one?

14 A. So that's Plan 2, which is what the
15 comparison point is in this table on page 8. But
16 Plan 3 in the GFSA used a mixture of 400 megawatts
17 of low LCOE and 400 megawatts of mid LCOE. So the
18 low LCOE corresponded to Elk River node, and the
19 mid LCOE corresponded to the Asbury node.

20 Q. And what was the source of the market
21 prices for the stipulation analysis?

22 A. The source of the market prices for
23 the stipulation analysis was the updated ABB price
24 curves which are referred to as the fall 2017 case,
25 which is something that again ABB produces a couple

1 times per year.

2 Q. Were they modeled on a node like the
3 GFSA was, the SPP node?

4 A. The stipulation analysis?

5 Q. Yes.

6 A. Yes.

7 Q. Which one was that?

8 A. The Asbury node.

9 Q. And why was the Asbury node used?

10 A. We might want to go in-camera here if
11 we're talking about confidential information.

12 MR. COOPER: Yes, Judge. Can we go
13 in-camera for a moment?

14 (REPORTER'S NOTE: At this point, an
15 in-camera session was held, which is contained in
16 Volume 4, page 266 of the transcript.)

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1 JUDGE BUSHMANN: Back in open
2 session.

3 BY MR. NATHAN WILLIAMS:

4 Q. Is there any wind energy currently
5 being delivered into SPP at the Asbury node?

6 A. Not that I'm aware of.

7 Q. Historically, has there been any
8 negative pricing at the Asbury node?

9 A. I would have to check.

10 Q. Does that mean you don't know?

11 A. I don't know.

12 Q. Do you know if there's been negative
13 pricing historically at the Elk River node?

14 A. Yes, I believe there has been.

15 Q. Do you know between Asbury and -- the
16 Asbury and the Elk River nodes, which one was
17 higher annual average prices?

18 A. Asbury has higher annual average
19 prices.

20 Q. And where is it that Elk River is
21 located?

22 A. In Kansas.

23 Q. Where in Kansas roughly? West
24 central? Southwest?

25 A. Central to the eastern side of

1 Kansas.

2 Q. And where is the Asbury node located?

3 A. Within Empire's service territory.

4 Q. Where within --

5 A. I believe there's a map in my
6 testimony, in my direct.

7 MR. COOPER: Would it be page 4 of
8 the GFSA?

9 THE WITNESS: Thank you. Yes. And
10 so it's not very clear in the picture, but there is
11 a labeling of Asbury.

12 BY MR. NATHAN WILLIAMS:

13 Q. Is that in Kansas?

14 A. No. Missouri.

15 Q. Northeast Missouri?

16 A. No. Southeast Missouri.

17 Q. Are you sure?

18 A. Sorry. Southwest Missouri.

19 Southwest Missouri, yeah. Thank you.

20 MR. NATHAN WILLIAMS: Could we have a
21 moment? I may be done.

22 JUDGE BUSHMANN: Yeah.

23 MR. NATHAN WILLIAMS: I don't have
24 any more questions for this witness at this time.
25 May I approach and collect my exhibits?

1 JUDGE BUSHMANN: Which exhibits are
2 you referring to?

3 MR. NATHAN WILLIAMS: I think it's
4 212 and 213.

5 JUDGE BUSHMANN: From the witness,
6 sure. Commissioner questions.

7 QUESTIONS BY CHAIRMAN HALL:

8 Q. Good afternoon.

9 A. Good afternoon.

10 Q. Turning to page 5 of your affidavit,
11 in particular Figure 2, and you have a reference to
12 the savings, and I want to make sure that I
13 understand what those savings are.

14 A. Sure.

15 Q. My understanding is that what you're
16 doing is you're comparing what customers will pay,
17 i.e. the revenue requirement, under the stipulation
18 and then comparing that with the 2016 IRP. Is that
19 correct?

20 A. The 2016 IRP plan but using the same
21 assumptions for market prices.

22 Q. Correct. So in other words, there's
23 going to be certain things that are going to
24 increase savings, certain things that are going to
25 decrease savings and I want to make sure that I

1 understand, when you're looking at the ledger, the
2 things that add and the things that subtract.

3 So in terms of increased revenues
4 from off-system sales, that's going to increase
5 savings, correct?

6 A. Correct. More revenue from SPP
7 sales.

8 Q. Okay. And that could be higher price
9 or it could be just more quantity?

10 A. Yes.

11 Q. Okay. Then there's also going to be
12 reduced costs from using a lower cost energy, i.e.
13 wind versus coal or possibly gas?

14 A. Right. So there's no -- there's no
15 fuel costs associated with these resources, right,
16 so it's strictly a variable operating cost and some
17 fixed operating costs for -- small operating costs
18 for the wind, and so it's -- there's not -- there's
19 no fuel cost for that.

20 Q. But there is a reduced operating cost
21 associated with using wind versus another energy
22 source?

23 A. Well, in this case, I think you're --
24 if you're comparing the 2016 IRP plan to the
25 settlement plan and the only difference is the

1 600 megawatts of wind in this case, that's the only
2 difference, the other generating resources are
3 going to dispatch to the market price signal in the
4 same way that they always have. It will be
5 consistent between the two plans. So the
6 difference will be strictly the wind.

7 **Q. So you're assuming that Asbury, other**
8 **coal plants, other gas facilities are operating at**
9 **the same capacity factor?**

10 A. Under these two cases where you're
11 using the same price curves, it's -- the modeling
12 of those resources is exactly the same. So the
13 difference is strictly the wind and that you have
14 an asset that's producing a lot of -- a lot of
15 revenue but has limited cost.

16 **Q. And then on the negative side of the**
17 **ledger, it's the costs to construct the new wind**
18 **and the payments to the tax equity partner,**
19 **partners; is that correct?**

20 A. There's the cost to construct.
21 There's the rate base, the return on rate base.
22 There's the fixed --

23 **Q. That's part of the costs, right?**

24 A. That's part of the cost of the wind.

25 **Q. Right.**

1 A. That we talk about as this LCOE,
2 which is this levelized cost of electricity for
3 building and opening, operating the wind resource.

4 **Q. Okay. And the payments to the tax**
5 **equity partner?**

6 A. Correct. So the tax equity is
7 incorporated into that analysis.

8 **Q. Are there any other factors other**
9 **than essentially those four that we identified that**
10 **affect the savings?**

11 A. Not when comparing these two plans.
12 If it was comparing the GFSA original plan with the
13 Asbury being turned off, you have a different --

14 **Q. So, for example, we're not taking the**
15 **tax cuts into effect when figuring the savings from**
16 **the customer savings plan?**

17 A. I think in both cases we're
18 incorporating the tax -- the tax savings from the
19 lower tax rate.

20 **Q. So in both cases you're assuming that**
21 **customers will get the benefit of the tax cut as of**
22 **October 1 of '18?**

23 A. So I'm speaking about this strictly
24 from a go-forward basis on the revenue requirement
25 of operating these assets and the cost of capital

1 associated with these investments, with the wind
2 investment, and a lower tax rate associated with
3 that investment.

4 Q. Okay. So --

5 A. I'm not talking about the rates per
6 se.

7 Q. But you're applying it evenly between
8 the two?

9 A. Correct.

10 Q. Okay. Anything else? Any other
11 significant factors that come into play when you're
12 determining these savings?

13 A. Not that I can think of.

14 Q. Okay. Could we turn to page 44 of
15 your surrebuttal?

16 A. Sure.

17 Q. I understand that this testimony was
18 provided, submitted prior to the negotiations that
19 led to the stipulation, but I want to understand if
20 what you say here is still your opinion, that
21 Asbury -- and I'm at line 2. Asbury is projected
22 to not generate enough revenue in the SPP market to
23 cover just its variable and fixed operation and
24 maintenance costs without consideration -- excuse
25 me, without considering any additional capital for

1 **three years. Is that still your position?**

2 A. Yes, I believe that's still the case.

3 **Q. So there could be a basis for keeping**
4 **Asbury open unrelated to your modeling, but**
5 **specific to your modeling, there is no reason to**
6 **keep it open, is there?**

7 A. Well, our modeling from the get go
8 was focused on both cost and risk.

9 **Q. Right.**

10 A. And so certainly from a least cost
11 perspective, and this is why the GFSA proposed
12 retiring Asbury, it made sense to retire it. But I
13 think there's --

14 **Q. Okay. And I understand that there**
15 **could be other reasons to keep it open, but from an**
16 **economic modeling perspective, there is no reason**
17 **to keep it open; is that correct?**

18 A. On an expected value basis, with the
19 expected forward curves, I would agree with that
20 statement.

21 **Q. On page 16 of your surrebuttal, on**
22 **line 15, you note that in 2017 Asbury's capacity**
23 **factor was 57 percent; is that correct?**

24 A. I'm sorry. I'm on the wrong page.
25 Page 16?

1 Q. Yes.

2 A. On line 15?

3 Q. Yes.

4 A. Yes.

5 Q. And I believe that it is the case,
6 and I think you alluded to this, that that capacity
7 factor has been going down over the last couple of
8 years?

9 A. Right.

10 Q. And why is that?

11 A. I think it's primarily due to market
12 prices and the cost of dispatching this plant
13 relative to the market price, it's making a
14 decision in every hour or time block. And
15 Mr. Mertens can talk more specifically about how
16 they operate the plant, but from an economic
17 perspective, I believe it relates to market prices.

18 Q. And so as more and more wind gets
19 incorporated in the -- in the SPP market, you would
20 expect that capacity factor to go down, correct?

21 A. Well, not necessarily. I think it
22 depends on wind, but it depends on the composition
23 of the resource mix in the region.

24 Q. Everything else constant, if we're
25 introducing significantly more wind into the

1 market, would you expect the capacity factor to go
2 down?

3 A. Introducing wind into the market in
4 that region or that zone or nodal area, yes.

5 Q. Page 21 of your surrebuttal and then
6 on to page 22, you describe the up-front savings
7 for the customer savings plan or ten-year savings,
8 and I want to understand -- and I know that this is
9 with regard to the original application of
10 800 megawatts, but I want to know the -- the second
11 column on Figure 5 refers to 550 megawatts. Is
12 that close to the savings that you're projecting
13 under the stipulated 600 megawatt amount?

14 A. Over the ten years?

15 Q. Yes.

16 A. I think with the new curves the
17 ten-year period is lower. I know it's lower than
18 that.

19 Q. Is that set forth somewhere either in
20 your affidavit or in other -- I didn't see it in
21 your affidavit.

22 A. It's not in my affidavit. It's -- I
23 show the 20-year and the 30-year. In the
24 stipulation modeling that Mr. Holmes can talk more
25 specifically to, I believe he shows the ten-year

1 annual savings.

2 Q. A couple of questions about your
3 testimony on page 24 concerning the impact of
4 additional wind on the -- on the market price.

5 A. Yes.

6 Q. I don't understand completely or
7 maybe even that much about how the queue works in
8 SPP. I have a little more understanding about how
9 it works in MISO. But it's my understanding that
10 there are 60,000 megawatts of wind in the queue in
11 SPP right now?

12 A. Right.

13 Q. What did you anticipate for how much
14 wind would come into SPP over any particular time
15 period as it relates to that 60,000 that's sitting
16 there now?

17 A. Right. Well, so part of this is done
18 as a part of the process that ABB goes through in
19 their power price forecasting exercise based on
20 what is in construction or fully permitted. So
21 there's different thresholds that get it into the
22 actual modeling at that time period, and they have
23 very discrete cutoffs in terms of when they'll look
24 at that for purposes of their next update.

25 So, for instance, for the fall 2017

1 curves, I believe the cutoff was September 1st or
2 something to that effect of 2017 when they look at
3 the queue and they make that designation. As you
4 probably know, there's lots of projects in the
5 queue that are hoping that maybe they'll get to the
6 next stage with a PPA with some entity. They're
7 bidding into lots of different procurements or
8 development opportunities.

9 So I'm not sure the queue itself is a
10 good source of information to derive just at an
11 aggregate level the amount of wind we can expect to
12 come into the market. I think understanding what's
13 sort of in construction versus permitted is a more
14 important exercise.

15 That said, I think it's also
16 important to recognize, and Dr. Marke points this
17 out, that this is changing. It's dynamic. There's
18 a lot of new announcements from day to day,
19 projects that are going into service and projects
20 that maybe aren't happenings as a result.

21 So as part of the GFSA modeling, we
22 took what was assumed by ABB, and these are the
23 models that are -- again, they're subscription
24 models. They weren't produced specific to Empire.
25 They're produced for all their clients, and it was

1 their latest update.

2 But we did run a scenario for OPC
3 where we looked at the queue at a later date in
4 time after ABB had done their cutoff and said,
5 okay, we see Wind Catcher, for instance, which was
6 actually referenced in the opening statement of OPC
7 as not being incorporated, but we looked at Wind
8 Catcher and we probability weighted Wind Catcher by
9 50 percent probability.

10 So in this additional scenario that
11 we ran for OPC, which I can describe the results, I
12 think they are in my testimony, we incorporated
13 that. We also looked at a whole range of projects
14 depending on what they were listed in terms of
15 permitting and such and assigned probabilities
16 ranging from 10 to 30 to 50 percent. And that led
17 to an additional 9.6 gigawatts more wind in the OPC
18 scenario that we ran.

19 **Q. 9.6 gigawatts over what time period?**

20 A. Well, over the entire time period.
21 It was just added into the ABB numbers, but it was
22 based on the near-term projects. So just another
23 clarification from something said in the opening,
24 the ABB model looks at known projects in the coming
25 years and looks at this list in terms of what's

1 been permitted and so on, but then out in the
2 future it also looks at what they call generics
3 that are being built for economic purposes.

4 So to characterize no more wind's
5 coming into SPP I think is inaccurate. There's
6 substantial more wind coming in just in the generic
7 modeling, and I can find that number if it's
8 helpful, but -- so they have a generic modeling,
9 they have the specific projects, and then we ran a
10 scenario on OPC's behalf that looked at adding even
11 more wind and what does that do to pricing, and
12 that dropped prices 5 to 7 percent. But our low
13 market case was 20 percent lower, so well within
14 that range. The savings went down some but not a
15 large amount, and I can get you the specific
16 numbers.

17 Q. Okay.

18 A. Would you like those numbers?

19 Q. Sure. Are they in testimony
20 somewhere?

21 A. I believe -- I believe they are in
22 data request responses, but I'm thinking
23 specifically whether it's incorporated in my
24 surrebuttal. I believe it is. Let me confirm
25 here. Yes, actually, it is. Page 26 of the

1 surrebuttal, top of the page, and you can see the
2 additional wind additions and retirements led to an
3 average market price reduction of 5 to 7 percent.
4 It dropped the savings 44 million to -- from
5 325 million to 281 million.

6 CHAIRMAN HALL: I have no further
7 questions. Thank you.

8 COMMISSIONER KENNEY: No questions.
9 Thank you.

10 COMMISSIONER RUPP: None for me.

11 JUDGE BUSHMANN: Recross based on
12 Commissioner questions. Staff?

13 MS. FORCK: Briefly, your Honor.
14 Thank you.

15 RECROSS-EXAMINATION BY MS. FORCK:

16 Q. Mr. McMahon, do you recall the
17 Chairman asking you -- pointing you to page 44 of
18 your surrebuttal testimony?

19 A. Yes. Yes, I do.

20 Q. The sentence that he directed you to
21 starts on -- well, I guess it starts on line 1, but
22 starting on line 2 it says, Asbury is projected to
23 not generate enough revenue in the SPP market to
24 cover just its variable and fixed operation and
25 maintenance costs without considering any

1 additional capital for three years under many of
2 the stochastic end points. Did I read that right?

3 A. Yes.

4 Q. So I want to point to the last part
5 of that sentence, under many of the stochastic end
6 points. Which end points are you referring to?

7 A. Well, I think we can see the end
8 points in Figure 11, and, you know, the end points
9 just for clarity were -- these are the scenarios
10 that combined the CO2 price uncertainty, the high
11 and low market price uncertainty, and the basis
12 congestion uncertainty.

13 So as you can see in Figure 11, in
14 the cases that start with no CO2, base market, high
15 congestion and move to the right, those are
16 negative EBITDA for Asbury, but in the cases where
17 there is high market, you have a positive EBITDA.

18 MS. FORCK: Thank you. Nothing
19 further.

20 JUDGE BUSHMANN: MEGC?

21 MR. WOODSMALL: No questions.

22 JUDGE BUSHMANN: Division of Energy?

23 MR. POSTON: No questions.

24 JUDGE BUSHMANN: Renew Missouri?

25 MR. LINHARES: No questions.

1 JUDGE BUSHMANN: Sierra Club?

2 MR. ROBERTSON: No questions.

3 JUDGE BUSHMANN: Joplin?

4 MS. BELL: Just a couple questions.

5 RECROSS-EXAMINATION BY MS. BELL:

6 Q. I believe Chairman Hall asked you
7 some questions and we've been talking exclusively
8 about SPP. Are you authorized to speak on behalf
9 of SPP?

10 A. No.

11 Q. Do you have any official affiliation
12 with SPP?

13 A. I do not.

14 Q. Are you aware of anyone who will
15 testify in this case or who I can direct questions
16 to that does have authority to speak on SPP rules
17 or regulations or plans for the future?

18 A. Not that I'm aware of specifically.
19 Mr. Mertens would be probably the closest
20 representative from the company.

21 MS. BELL: Thank you.

22 JUDGE BUSHMANN: OPC?

23 MR. NATHAN WILLIAMS: Thank you.

24 RECROSS-EXAMINATION BY MR. NATHAN WILLIAMS:

25 Q. Do you remember Chairman Hall asked

1 you about the SPP queue and you indicated that
2 Empire had done some additional modeling where it
3 had increased the amount of wind generation in the
4 SPP footprint?

5 A. Yes, I do.

6 Q. You indicated that Empire had
7 assigned some probabilities to -- or somebody had
8 assigned some probabilities to wind projects being
9 built and that influenced, I guess, how many
10 gigawatts or megawatts were included in the
11 modeling?

12 A. Yes.

13 Q. What probability did Empire assign
14 for this project in that modeling?

15 A. This project was not included in that
16 modeling.

17 Q. Why not?

18 A. Simply because it wasn't -- it was
19 not.

20 MR. NATHAN WILLIAMS: No further
21 questions.

22 JUDGE BUSHMANN: Redirect?

23 MR. COOPER: Thank you, your Honor.

24 REDIRECT EXAMINATION BY MR. COOPER:

25 Q. Mr. McMahon, you were asked several

1 questions about the, I think what you described as
2 the build schedule that was in your -- was that in
3 your affidavit; is that correct?

4 A. Correct.

5 Q. And you talked about the retirements
6 that could have been in there and, in fact, were
7 shown on DR responses, correct?

8 A. Correct.

9 Q. Were all those retirements included
10 in the model runs?

11 A. Yes.

12 Q. You were asked questions about
13 capacity factors for wind projects, I think, or
14 actual wind farms that related to 2014, 2015 and
15 2016. Do you remember that?

16 A. Yes.

17 Q. Are those directly relevant to what
18 capacity factors would be for wind on a going-
19 forward basis?

20 A. If you're referring to Elk River and
21 Meridian Way projects as being relevant to
22 evaluating the 600 megawatts of new build wind, I
23 would say no.

24 Q. And why is that?

25 A. I think the characteristics, as I

1 explained in my response, of the new wind are very
2 different than what would be considered traditional
3 wind in years ago with higher turbines and more
4 efficient turbines, better siting and a range of
5 other factors.

6 Q. You were asked, I think, a general
7 question about whether Kansas capacity factors for
8 wind are generally better than Missouri. Do you
9 remember that?

10 A. Yes.

11 Q. I think you said yes. How about for
12 the RFP results that have been -- that you've
13 reviewed, are capacity factors better in Missouri
14 or Kansas?

15 A. I haven't reviewed specifically the
16 RFP results other than what was incorporated in the
17 modeling.

18 Q. You were asked about CRA's role, and
19 I think you focused on four words: Review,
20 identify, translate and explain; is that correct?

21 A. Correct.

22 Q. What do you mean by review?

23 A. Well, there was hundreds of modeling
24 runs completed for this analysis, and in every one
25 of these modeling runs there was up-front analysis

1 or review of inputs, and there was review on the
2 back end of all of that analysis as well. So
3 review of the analysis, review of the responses to
4 the hundreds or -- of data requests, and obviously
5 review and development of the testimony.

6 **Q. How about identify, what job are you**
7 **talking about there?**

8 A. Identifying issues, issues with the
9 modeling, issues with any of the results that came
10 out that looked different than expected that needed
11 to be reviewed again or just in a general QC
12 process.

13 **Q. Translate?**

14 A. Translate, as part of the process
15 there was a lot of interaction with the various
16 parties on these results, again, thousands of runs,
17 concluding all the stochastic analysis, and lots of
18 explanation that needs to come out of this to
19 translate this into something like the line chart
20 that we've been talking about. That has a lot of
21 information embedded behind it. I think it's a
22 useful tool for looking at how this plan impacts
23 cost and risk.

24 **Q. And that's the explain portion?**

25 A. Yeah. Explain I think is what we're

1 doing here and taking the -- taking all those
2 translated datas and putting them into comm-- into
3 a communicated form.

4 Q. And this is just kind of a
5 definition. I think you, in answering some
6 questions about what units were left on or not left
7 on in the modeling runs, you referred to some being
8 left in for black start purposes. What does that
9 mean?

10 A. That's generally just reliability,
11 and if the system goes down, that certain units
12 have to be available for that to bring the system
13 back up.

14 Q. I think you answered to one of the
15 questions that you didn't offer opinion to Empire
16 on the closing of units. Do you remember that?

17 A. Could you refresh me?

18 Q. Yeah. There was a question about
19 whether you offered any opinions as to the units
20 that Empire had decided to allow to retire, that
21 sort of thing. Do you remember that now?

22 A. Right.

23 Q. Did you consider the selections that
24 had been made by Empire? I guess the real question
25 is did you have any contrary opinion to what was

1 **done?**

2 A. No, we didn't have a contrary opinion
3 to what was done, but we did review it.

4 Q. You were asked some -- hold on. Let
5 me turn to my own testimony before I get too far
6 down the road here.

7 You were asked questions about
8 negative pricing and the possibilities of that. I
9 think in your surrebuttal testimony on page 33 you
10 have a chart where you observe some negative
11 pricing incidents; is that correct?

12 A. Yes.

13 Q. And how would you describe what you
14 discovered there?

15 A. Well, I think negative pricing is
16 much more common in real time, which is -- the
17 market monitor for SPP described that, and in day-
18 ahead we see a much lower incidence of negative
19 pricing. This is when units are being scheduled in
20 to meet load.

21 So I think you're -- and day-ahead is
22 really how we model. So I think the bigger
23 question was, well, did you incorporate negative
24 pricing in your modeling? And the answer is,
25 absolutely, yes. It was factored in to the nodal

1 basis adjustments to the ABB price curve that we
2 describe in our testimony by looking at the history
3 of basis differentials, and those -- those
4 incorporate negative pricing.

5 Q. And I think this chart actually is
6 specific to Elk River, correct?

7 A. Correct.

8 Q. But incident of -- and maybe you said
9 this already, but incident of negative pricing
10 would be impacted by specific locations node by
11 node?

12 A. Correct. Depending on the amount of
13 resource in that region, the amount of congestion,
14 the amount of load.

15 Q. You were asked questions about, I
16 think, potential changes in SPP regarding
17 dispatchability of wind. Do you remember that?

18 A. Yes.

19 Q. Did you model wind as dispatchable?

20 A. We modeled wind as a shaped resource.

21 Q. So give me some more explanation
22 about what you mean by that.

23 A. Well, wind has a shape to it, an
24 average shape to it. So it's not dispatchable in
25 the sense that it's turning on and off specific to

1 a price signal per se. It's a -- it's modeled as a
2 shape.

3 **Q. And then there was some discussion**
4 **about curtailment. Curtailment, is that included**
5 **in the modeling?**

6 A. Yeah, curtailment's included in the
7 modeling to the extent that it's accommodated in
8 the scenarios that we ran around the basis
9 differentials, so in cases where you have different
10 levels of basis, but it's not modeled explicitly as
11 curtailment in the model.

12 **Q. You were asked some questions about,**
13 **I think, the history of PTCs, 1994, and you made a**
14 **statement that capital costs, I assume you meant**
15 **for wind, hasn't been near what it is today over**
16 **that time period. What did you mean by that?**

17 A. Well, I meant that capital costs have
18 declined substantially, and this is one of the
19 reasons that Empire filed at GFSA because capital
20 costs are so much lower today. And the
21 intersection of the expiring PTC and very low
22 capital costs that have been proved out through the
23 RFP process has really made this a very different
24 situation today than it was, you know, in the past
25 when we had PTCs. I mean, consider the fact that

1 you can -- you can buy a wind farm today for a
2 price that's, on a capital cost basis, that's lower
3 than a combined cycle generating unit with no fuel
4 cost. That's pretty compelling. And that's not
5 true of the past.

6 MR. COOPER: That's all the questions
7 I have, your Honor. Thank you.

8 JUDGE BUSHMANN: Thank you for your
9 testimony, Mr. McMahon. You may step down now.
10 You're excused.

11 That's all we're going to do today.
12 I had intended to stop at five anyway. Obviously
13 we're not where I anticipated to be as far as the
14 schedule. So as a result, for tomorrow I think
15 we'll start at 8:30 a.m., and if our pace doesn't
16 pick up, I would ask the parties to be prepared to
17 go late tomorrow night to try to keep on schedule.

18 That's all I have. We'll be in
19 recess until 8:30 tomorrow morning.)

20 (WHEREUPON, the hearing was recessed
21 at 5:27 p.m.)

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C E R T I F I C A T E

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, Kellene K. Feddersen, Certified Shorthand Reporter with the firm of Alaris Litigation Services, do hereby certify that I was personally present at the proceedings had in the above-entitled cause at the time and place set forth in the caption sheet thereof; that I then and there took down in Stenotype the proceedings had; and that the foregoing is a full, true and correct transcript of such Stenotype notes so made at such time and place.

Given at my office in the City of Jefferson, County of Cole, State of Missouri.



Kellene K. Feddersen, RPR, CSR, CCR

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